

# Memorandum

To: CHAIR AND COMMISSIONERS

Meeting Date: December 10-11, 2003

Reference No.: 2.5b.(6)  
Action Item

From: ROBERT L. GARCIA  
Chief Financial Officer

Prepared by: Robert Sertich  
Chief  
Division of Budgets

Ref: **FINANCIAL ALLOCATION FOR TEN STIP PROJECTS AND ONE SHOPP PROJECT  
TO BE FUNDED FROM GARVEE BOND PROCEEDS.**  
**RESOLUTION FG-03- , AMENDING AND RESTATING RESOLUTION FG-03-01**

## ISSUE

The first issuance of Grant Anticipation Revenue Vehicle (GARVEE) bonds is anticipated to occur in February 2004. Three projects were authorized for allocations of GARVEE bond proceeds under Resolution FG-03-01, adopted at the September 2003 meeting. This resolution has been amended and restated, and included in this book item, to increase the total amount of the proceeds that would be available for these three projects. Specifically, the additional proceeds are needed to address revised project estimates, capitalized interest, and bond insurance. The amended and restated resolution also incorporates new allocations for seven additional State Transportation Improvement Program (STIP) projects and one State Highway Operation and Protection Program (SHOPP) project and provides for certain technical adjustments.

Amended and Restated Resolution FG-03-01 provides for the following revisions to the original resolution:

- Section 2.1.1 -- Increases the amount of the STIP allocation for the Santa Clara Interstate 880/Coleman Interchange project (PPNO 0409C) from \$67,000,000 to \$68,000,000 to accommodate revised project funding levels, capitalized interest, and bond insurance, and incorporates clarifying language and a technical adjustment.
- Section 2.1.2 -- Increases the amount of the STIP allocation for the Riverside 60/91/215 Interchange project (PPNO 0121D) from \$242,000,000 to \$247,500,000 to accommodate revised project funding levels, capitalized interest, and bond insurance, deletes the reference to a second bond sale since all needed proceeds will be secured through this initial issuance, and incorporates a technical adjustment.

- Section 2.1.3. -- Increases the amount of the STIP allocation for the San Diego I-15 Managed Lanes project (PPNO 0672) from \$181,000,000 to \$189,000,000 to accommodate revised project funding levels, capitalized interest, and bond insurance, and incorporates clarifying language and a technical adjustment.
- Section 2.1.4 – Adds a \$37,000,000 STIP allocation for the Santa Clara State Route 87 (North) project (PPNO 0443N).
- Section 2.1.5 – Adds a \$42,500,000 STIP allocation for the Santa Clara State Route 87 (South) project (PPNO 0443S).
- Section 2.1.6 – Adds a \$26,000,000 STIP allocation for Los Angeles County Metropolitan Transportation Authority (LACMTA) Route 5 HOV Lanes from Route 118 to Route 14 project (PPNO 0162P).
- Section 2.1.7 – Adds a \$33,000,000 STIP allocation for LACMTA Route 14 near Palmdale, from Vincent Ramp Undercrossing to Avenue P-8 Undercrossing project (PPNO 0391A).
- Section 2.1.8 – Adds a \$13,000,000 STIP allocation for LACMTA Route 90 Playa Vista Area Congestion Improvement project (PPNO 2012A).
- Section 2.1.9 – Adds a \$30,000,000 STIP allocation for LACMTA Route 405 Auxiliary Lane from Waterford Avenue to Route 10 project (PPNO 2333).
- Section 2.1.10 – Adds a \$27,000,000 STIP allocation for LACMTA Route 405/101 Gap Closure project (PPNO 2336).
- Section 2.1.11 – Adds a \$58,000,000 SHOPP allocation for Route 193 to Auburn Ravine to Route 174 project (PPNO 1517).
- Section 2.5 – Inserts a corrected reference to Government Code Section 14553.7 relative to the pledge of future receipts of federal transportation funds to the payment of debt service.

### **RECOMMENDATION**

The Department recommends that the Commission adopt the attached resolution amending and restating Resolution FG-03-01, consistent with the action taken at this meeting relative to LACMTA's STIP Amendment 02S-105, and upon confirmation by Santa Clara Valley Transportation Authority (VTA) that PPNOs 0443N and 0443S have environmental clearance and completed project design.

The original Resolution FG-03-01 and the three related allocations established bond proceeds for this first GARVEE issuance at a level of \$490,000,000. Approval of the pending allocations would add \$281,000,000 (Exhibit A, as revised) to the existing allocation, for a total of \$771,000,000. Consistent with the pending allocations, adoption of the Amended and Restated Resolution would provide for the sale of bonds in the amount of \$771,000,000, and would result in the pledge of future receipts of federal transportation funds to the payment of debt service, the annual amount of which is estimated as described in Exhibits B.1. and B.2. of the Amended and Restated Resolution. The \$771,000,000 allocation would provide funds for costs of right of way, construction, support, capitalized interest, and issuance. Please see Attachment 1 (State Route 87 North), Attachment 2 (State Route 87 South), Attachment 3 (Route 5 HOV Lanes), Attachment 4 (Route 14 near Palmdale), Attachment 5 (Route 90 Playa Vista), Attachment 6 (Route 405 Auxiliary Lane), Attachment 7 (NB Route 405/101 Gap Closure), and Attachment 8 (Route 193 to Auburn Ravine to Route 174) for the supporting financial and cost/benefit analyses for the eight projects for which new allocations are requested. The financial and cost/benefit analyses for the Santa Clara I-880/Coleman Interchange, Riverside 60/91/215 Interchange, and I-15 Managed Lanes projects were submitted to the Commission at the September 2003 meeting.

The projects have been determined eligible for GARVEE financing in accordance with Title 23 of the U.S. Code, California Government Code Sections 14550 et al, and all other applicable federal and state laws. Additionally, the projects are consistent with the Commission's policies, including GARVEE guidelines adopted under Resolution G-00-03, as amended by G-03-09. The Department is in the process of securing federal-aid authorizations from the Federal Highway Administration (FHWA) for the use of GARVEE financing and advance construction for the eight new projects included in this book item. The remaining three projects were previously approved by the FHWA for partial funding under the federal GARVEE program.

### **BACKGROUND**

During the September 2003 meeting, the Commission approved allocation requests for the use of GARVEE bond proceeds for three projects: the San Diego Interstate 15 Managed Lanes (PPNO 0672), Santa Clara Interstate 880/Coleman Interchange (PPNO 0409C), and Riverside 60/91/215 Interchange (PPNO 0121D). The amount of bond proceeds needed for each of these projects was recently revised to reflect updated project estimates and the use of capitalized interest and bond insurance in the financing plan. The revised amounts are included in the attached resolution under Exhibit A, Projects 1-3.

Santa Clara State Route 87 North (PPNO 0443N) and State Route 87 South (PPNO 0443S) were both programmed for GARVEE financing through STIP amendments approved by the Commission in May 2003. The Santa Clara VTA anticipates that these two projects will have met the requirements of environmental clearance and completed project design by the time of allocation, consistent with State statute and the Commission's GARVEE Guidelines, and are, therefore, requesting allocations for these two projects at this meeting.

At the October 2003 meeting, the LACMTA submitted a STIP amendment for notice requesting GARVEE financing for 17 projects. They since refined their proposal and have submitted the STIP amendment and related allocation request for action on only five of the 17 projects. These projects are: Route 5 from Route 118 to Route 14 HOV Lanes, Route 14 near Palmdale HOV Lanes, Route 90 Playa Vista Area Congestion Improvement, Route 405 Auxiliary Lane, and Northbound Route 405/101 Gap Closure (PPNOs 0162P, 0391A, 2012A, 2333, and 2336, respectively).

Similarly, the Route 193 to Auburn Ravine to Route 174 project (PPNO 1517) was presented for a SHOPP amendment at the October meeting. The Department requests an allocation for the use of GARVEE proceeds to finance this roadway and bridge rehabilitation project.

In order to proceed with this issuance as proposed, a revised resolution amending and restating Resolution (FG-03-01) must be adopted that incorporates the items discussed above. This resolution (1) declares the Commission's intent to finance the project from the sale of GARVEE bonds; (2) makes certain findings that are required under the GARVEE program provisions and Guidelines; (3) requests the State Treasurer to proceed with the issuance of GARVEE bonds; (4) pledges future federal funds to the payment of debt service on the GARVEE bonds; and (5) provides the allocations necessary for expenditure of the bond proceeds.

GARVEEs are tax-exempt debt instrument financing mechanisms that are backed by annual federal appropriations for federal-aid transportation projects. Proceeds of the financing can be used for the costs of right of way and/or construction of highway or other transportation projects that are eligible under Title 23 of the United States Code, and that meet all federal requirements. Additionally, projects must have environmental clearance and completed project design, be designated for GARVEE financing by the Commission, and eligible through the Federal Highway Administration for advance construction using GARVEE financing. Due to constitutional limitations, state funds are not used for payment of debt service; therefore, GARVEE financing relies solely on future federal-aid funding for debt repayment, and as a result, is subject to federal match requirements. However, state or local funds can be used for matching purposes outside of the debt service, in funding components prior to, or throughout the construction period.

Attachments

**SANTA CLARA A - SR-87 NORTH**  
**Estimate of GARVEE Financing -- Sensitivity Analyses**  
**and Benefits of Advancing the Project**

<b>Total Project Cost:</b>	\$ 49,632,750	\$ 49,632,750	\$ 49,632,750	\$ 49,632,750
Amount Financed - GARVEE <sup>(1)</sup>	\$ 36,300,000	\$ 36,300,000	\$ 36,300,000	\$ 36,300,000
Coupon Rate <sup>(2)</sup>	4.50%	4.50%	4.75%	5.00%
Bond Term (Years) <sup>(3)</sup>	10	10	10	10
<b>Total Discounted Interest Payments</b>	<b>\$ 8,210,289</b>	<b>\$ 8,623,197</b>	<b>\$ 9,031,798</b>	
Discounted Cost of Inflation - 4 Years <sup>(3)</sup>	6,554,526	6,515,698	6,477,238	
Discounted Congestion Reduction & Safety Benefits - 4 Years <sup>(4)</sup>	5,760,000	5,760,000	5,760,000	
Discounted Economic Benefits *	62,321,808	60,850,287	59,416,896	
Other Economic Benefit - Jobs Created *	392	392	392	392
<b>Total Benefits/Cost Avoidance</b>	<b>\$ 12,314,526</b>	<b>\$ 12,275,698</b>	<b>\$ 12,237,238</b>	
<b>Net (Cost) Benefits</b>	<b>\$ 4,104,237</b>	<b>\$ 3,652,501</b>	<b>\$ 3,205,440</b>	
<b>Debt Service</b>				
RIP Share of Annual Debt Service (100%)	4,587,551	4,644,113	4,701,016	
IIP Share of Annual Debt Service (0%)	-	-	-	
<b>Total Estimated Annual Debt Service Payment</b> <sup>(5)(6)</sup>	<b>\$ 4,587,551</b>	<b>\$ 4,644,113</b>	<b>\$ 4,701,016</b>	
Average Annual County STIP Share (RIP) <sup>(7)</sup>	36,608,000	36,608,000	36,608,000	
RIP Share of Estimated Annual Debt Service	4,587,551	4,644,113	4,701,016	
RIP Share of Est. Annual Debt Service for SR-87 South Financing	5,282,635	5,347,766	5,413,291	
RIP Share of Est. Annual Debt Service for I-880/Coleman Financing	7,738,380	7,841,683	7,945,667	
<b>Average Remaining County Share After Payment of Debt Service</b>	<b>\$ 18,999,434</b>	<b>\$ 18,774,438</b>	<b>\$ 18,548,026</b>	

**Assumptions:**

- (1) This analysis includes three scenarios with 1/4% interest increases based on a principal amount of \$35.511 mill. plus 2.0% for issuance costs.
- (2) Coupon rates are based on current market conditions.
- (3) Absent GARVEE bond financing, it is estimated that this project would be delayed for at least four years with an assumed 3.5% construction inflation rate.
- (4) Congestion reduction and safety benefits are provided by the Office of Transportation Economics.
- (5) Debt service payments will be made from the federally-funded portion of regional improvement program shares.
- (6) Current STIP programming for the SR-87 South project will be utilized to make debt service payments through FY 2006-2007.
- (7) Programming in future STIPS will also be required for the remaining payments through 2013-2014.
- (7) Average Annual County STIP Share, provided by Programming staff, is an estimate of the amount available at the beginning of the 2002 STIP cycle for debt service pymts.

**Other Benefits Not Included in this Analysis:**

- # Improved quality of life - Environmental and Social: Air, wetlands & water quality, noise, visual impact, and other social/neighborhood factors.
- # Expanded business activity as a result of improvement in traffic flow and access.
- # Improved property value due to land development and better land use.

\* **Non-Add. For information only. Without GARVEE proceeds, the realization of these benefits would be delayed until other fund sources become available, consistent with the above assumptions.**

Every \$100 million invested in transportation creates an average of 790 jobs.  
The economic multiplier of each \$100 million invested in transportation is equivalent to \$195 million in economic benefits gained.

**STIP PROGRAMMING FOR DEBT SERVICE  
Santa Clara VTA -- SR-87 North**

Programming Summary	
Principal Amount	\$ 35,511
Issuance Costs/Bond Ins (2.0%)	\$ 0.789
Total Principal Amount	\$ 36,300
Interest	\$ 9,576
Total Amount Financed	\$ 45,876
	\$ 4,587.5 Annual Programming
	\$ 13,762.5 FY 03/04 through FY 06/07
	\$ 32,112.5 FY 07/08 through FY 14/15
	\$ 45,875.0 Total Programming

**Santa Clara VTA -- SR-87 North - Cash Flow Analysis**

(\$ in Thousands)

	2002-03 & PRIOR	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-2010	2010-2011	TOTAL
<b>RESOURCES:</b>										
Beginning Reserve	\$ -	\$ -	\$ -	\$ 35,275.3	\$ 25,894.6	\$ 1,503.3	\$ 624.0	\$ 634.0	\$ 644.1	\$ 654.4
Investment Income - SMIF Earnings	\$ -	\$ 182.7	\$ 407.8	\$ 23.7	\$ 9.8	\$ 10.0	\$ 10.1	\$ 10.3	\$ 10.5	\$ 664.9
GARVEE Bond Proceeds	\$ -	\$ 35,510.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,510.7
Local Contribution	\$ 9,047.3	\$ 5,074.8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,122.0
SHOPP (Federal)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SHOPP (State)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
STIP - RIP	\$ -	\$ -	\$ 4,587.5	\$ 4,587.5	\$ 4,587.5	\$ 4,587.5	\$ 4,587.5	\$ 4,587.5	\$ 4,587.5	\$ 32,112.5
<b>TOTAL RESOURCES</b>	<b>\$ 9,047.3</b>	<b>\$ 40,768.2</b>	<b>\$ 40,270.6</b>	<b>\$ 30,505.8</b>	<b>\$ 6,100.6</b>	<b>\$ 5,221.5</b>	<b>\$ 5,231.6</b>	<b>\$ 5,241.9</b>	<b>\$ 5,252.4</b>	<b>\$ 82,410.1</b>
<b>EXPENDITURES:</b>										
Non-ROW Construction Related Costs	\$ 8,982.6	\$ 1,865.8	\$ -	\$ 24,415.0	\$ 889.1	\$ -	\$ -	\$ -	\$ -	\$ 10,848.4
ROW/Construction Costs	\$ 64.7	\$ 3,627.1	\$ 9,788.5	\$ 4,587.5	\$ 4,587.5	\$ 4,587.5	\$ 4,587.5	\$ 4,587.5	\$ 4,587.5	\$ 38,784.4
Debt Service - Federal Funds*	\$ -	\$ -	\$ 4,587.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32,112.5
<b>Total Expenditures</b>	<b>\$ 9,047.3</b>	<b>\$ 5,492.9</b>	<b>\$ 14,376.0</b>	<b>\$ 29,002.5</b>	<b>\$ 5,476.6</b>	<b>\$ 4,587.5</b>	<b>\$ 4,587.5</b>	<b>\$ 4,587.5</b>	<b>\$ 4,587.5</b>	<b>\$ 81,745.3</b>
<b>BALANCE</b>	<b>\$ -</b>	<b>\$ 35,275.3</b>	<b>\$ 25,894.6</b>	<b>\$ 1,503.3</b>	<b>\$ 624.0</b>	<b>\$ 634.0</b>	<b>\$ 644.1</b>	<b>\$ 654.4</b>	<b>\$ 664.9</b>	<b>\$ -</b>
	2011-12	2012-13	2013-14**	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Total
<b>RESOURCES:</b>										
Beginning Reserve	\$ 664.9	\$ 675.5	\$ 686.3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Income - SMIF Earnings	\$ 10.6	\$ 10.8	\$ 11.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32.4
Local Contribution	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Future RIP Commitment	\$ 4,587.5	\$ 4,587.5	\$ 4,587.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,762.5
<b>TOTAL RESOURCES</b>	<b>\$ 5,263.0</b>	<b>\$ 5,273.8</b>	<b>\$ 5,284.8</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 13,794.9</b>
<b>EXPENDITURES:</b>										
Debt Service - Federal Funds*	\$ 4,587.5	\$ 4,587.5	\$ 4,587.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,762.5
<b>Total Expenditures</b>	<b>\$ 4,587.5</b>	<b>\$ 4,587.5</b>	<b>\$ 4,587.5</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 13,762.5</b>
<b>BALANCE</b>	<b>\$ 675.5</b>	<b>\$ 686.3</b>	<b>\$ 697.3</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
<b>RESOURCES:</b>										
Beginning Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Income - SMIF Earnings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>TOTAL RESOURCES</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>EXPENDITURES:</b>										
Debt Service - Federal Funds*	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>BALANCE</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

\* A rate of 4.50% was used in calculating the annual debt service payments over a 10-year term, based on a project need of \$35,511 million with 2.0% added for costs of issuance.

\*\*Any excess funds, i.e., from investment income, could be used toward reducing the debt service payment.

**Santa Clara Valley Transportation Authority**  
**SR-87 North**  
**Level Debt Service**  
**4.50%, 10-Year Term**

Year	Coupon Rate	Principal	Semi-Annual Interest	Annual Interest	Annual Debt Service	Discount Factor	Present Value
8/1/2004	4.50%	\$ 2,954,051	\$ 816,750	\$ 1,633,500	\$ 4,587,551	0.978231976	\$ 1,597,942
2/1/2005	4.50%	\$ 3,086,984	\$ 750,284	\$ 1,500,568	\$ 4,587,551	0.936107154	\$ 1,404,692
2/1/2006	4.50%	\$ 3,225,898	\$ 680,827	\$ 1,361,653	\$ 4,587,551	0.89579632	\$ 1,219,764
2/1/2007	4.50%	\$ 3,371,063	\$ 608,244	\$ 1,216,488	\$ 4,587,551	0.857221359	\$ 1,042,800
2/1/2008	4.50%	\$ 3,522,761	\$ 532,395	\$ 1,064,790	\$ 4,587,551	0.82030752	\$ 873,455
2/1/2009	4.50%	\$ 3,681,285	\$ 453,133	\$ 906,266	\$ 4,587,551	0.784983273	\$ 711,404
2/1/2010	4.50%	\$ 3,846,943	\$ 370,304	\$ 740,608	\$ 4,587,551	0.751180165	\$ 556,330
2/1/2011	4.50%	\$ 4,020,056	\$ 283,748	\$ 567,496	\$ 4,587,551	0.718832694	\$ 407,934
2/1/2012	4.50%	\$ 4,200,958	\$ 193,297	\$ 386,593	\$ 4,587,551	0.687878176	\$ 265,929
2/1/2013	4.50%	\$ 4,390,001	\$ 98,775	\$ 197,550	\$ 4,587,551	0.658256628	\$ 130,039
2/1/2014							\$ 8,210,289
		\$ 36,300,000	\$ 9,575,512	\$ 9,575,512	\$ 45,875,512		

\*Principal amount includes project funding in the amount of \$35,510,740 plus 2.0% for costs of issuance.

**SANTA CLARA VTA -- SR-87 NORTH**  
**Cost Of Inflation (Discounted at 4.50%)**

Years Project Delayed	Project Cost	Inflation Rate	Cost of Delay	Inflated Cost	Present Value	
					Discount Factor (4.50%)	Discounted Cost
1	<b>49,632,750</b>	3.50%	1,737,146	51,369,896	0.956938	1,662,341
2	51,369,896	3.50%	1,797,946	53,167,843	0.915730	1,646,433
3	53,167,843	3.50%	1,860,874	55,028,717	0.876297	1,630,678
4	55,028,717	3.50%	1,926,005	56,954,722	0.838561	1,615,073
5	56,954,722	3.50%	1,993,415	58,948,137	0.802451	1,599,618

Office of Transportation Economics - Average Annual Benefit/Cost Savings	\$ 1,440,000
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**SANTA CLARA A - SR-87 SOUTH**  
**Estimate of GARVEE Financing -- Sensitivity Analyses**  
**and Benefits of Advancing the Project**

<b>Total Project Cost:</b>	\$ 71,807,390	\$ 71,807,390	\$ 71,807,390	\$ 71,807,390
Amount Financed - GARVEE <sup>(1)</sup>	\$ 41,800,000	\$ 41,800,000	\$ 41,800,000	\$ 41,800,000
Coupon Rate <sup>(2)</sup>	4.50%	4.75%	4.75%	5.00%
Bond Term (Years)	10	10	10	10
<b>Total Discounted Interest Payments</b>	<b>\$ 9,454,272</b>	<b>\$ 9,929,742</b>	<b>\$ 10,400,253</b>	
Discounted Cost of Inflation - 4 Years <sup>(3)</sup>	9,482,920	9,426,745	9,371,102	
Discounted Congestion Reduction & Safety Benefits - 4 Years <sup>(4)</sup>	13,060,000	13,060,000	13,060,000	
Discounted Economic Benefits *	90,165,594	88,036,635	85,962,841	
Other Economic Benefit - Jobs Created *	567	567	567	567
<b>Total Benefits/Cost Avoidance</b>	<b>\$ 22,542,920</b>	<b>\$ 22,486,745</b>	<b>\$ 22,431,102</b>	
<b>Net (Cost) Benefits</b>	<b>\$ 13,088,648</b>	<b>\$ 12,557,002</b>	<b>\$ 12,030,849</b>	
		<b>Bond Term - 10 Years</b>		
RIP Share of Annual Debt Service (100%)	5,282,635	5,347,766	5,413,291	
IIP Share of Annual Debt Service (0%)	-	-	-	
<b>Total Estimated Annual Debt Service Payment</b> <sup>(5)(6)</sup>	<b>\$ 5,282,635</b>	<b>\$ 5,347,766</b>	<b>\$ 5,413,291</b>	
Average Annual County STIP Share (RIP) <sup>(7)</sup>	36,608,000	36,608,000	36,608,000	
RIP Share of Estimated Annual Debt Service	5,282,635	5,347,766	5,413,291	
RIP Share of Est. Annual Debt Service for SR-87 North Financing	4,587,551	4,644,113	4,701,016	
RIP Share of Est. Annual Debt Service for I-880/Coleman Financing	7,738,380	7,841,683	7,945,667	
<b>Average Remaining County Share After Payment of Debt Service</b>	<b>\$ 18,999,434</b>	<b>\$ 18,774,438</b>	<b>\$ 18,548,026</b>	

**Assumptions:**

- (1) This analysis includes three scenarios with 1/4% interest increases based on a principal amount of \$40.901 mill. plus 2.0% for issuance costs.
- (2) Coupon rates are based on current market conditions.
- (3) Absent GARVEE bond financing, it is estimated that this project would be delayed for at least four years with an assumed 3.5% construction inflation rate.
- (4) Congestion reduction and safety benefits are provided by the Office of Transportation Economics.
- (5) Debt service payments will be made from the federally-funded portion of regional improvement program shares.
- (6) Current STIP programming for the SR-87 South project will be utilized to make debt service payments through FY 2006-2007.
- (7) Programming in future STIPS will also be required for the remaining payments through 2013-2014.
- (8) Average Annual County STIP Share, provided by Programming staff, is an estimate of the amount available at the beginning of the 2002 STIP cycle for debt service pymts.

**Other Benefits Not Included in this Analysis:**

- # Improved quality of life - Environmental and Social: Air, wetlands & water quality, noise, visual impact, and other social/neighborhood factors.
- # Expanded business activity as a result of improvement in traffic flow and access.
- # Improved property value due to land development and better land use.

\* Non-Add. For information only. Without GARVEE proceeds, the realization of these benefits would be delayed until other fund sources become available, consistent with the above assumptions.

Every \$100 million invested in transportation creates an average of 790 jobs.

The economic multiplier of each \$100 million invested in transportation is equivalent to \$195 million in economic benefits gained.

**STIP PROGRAMMING FOR DEBT SERVICE  
Santa Clara VTA -- SR-87 South**

Programming Summary	
Principal Amount	\$ 40,901
Issuance Costs/Bond Ins (2.0%)	\$ 0,899
Total Principal Amount	\$ 41,800
Interest	\$ 11,026
Total Amount Financed	\$ 52,826
	\$ 5,282.6 Annual Programming
	\$ 15,847.8 FY 03/04 through FY 06/07
	\$ 36,978.2 FY 07/08 through FY 14/15
	\$ 52,826.0 Total Programming

**Santa Clara VTA -- SR-87 South - Cash Flow Analysis**

(\$ in Thousands)

	2002-03 & PRIOR	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-2010	2010-2011	TOTAL
<b>RESOURCES:</b>										
Beginning Reserve	\$ -	\$ -	\$ 36,974.7	\$ 10,643.8	\$ 542.7	\$ 334.3	\$ 339.7	\$ 345.1	\$ 350.6	\$ -
Investment Income - SMIF Earnings	\$ -	\$ 152.9	\$ 167.6	\$ 8.5	\$ 5.3	\$ 5.3	\$ 5.4	\$ 5.5	\$ 5.6	\$ 356.2
GARVEE Bond Proceeds	\$ -	\$ 40,901.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,901.0
Local Contribution	\$ 7,992.2	\$ 4,412.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,404.4
SHOPP (Federal)	\$ -	\$ 1,212.2	\$ 11,784.3	\$ 3,383.3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,379.8
SHOPP (State)	\$ -	\$ 157.1	\$ 1,526.8	\$ 438.3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,122.2
STIP - RIP	\$ -	\$ -	\$ 5,282.6	\$ 5,282.6	\$ 5,282.6	\$ 5,282.6	\$ 5,282.6	\$ 5,282.6	\$ 5,282.6	\$ 36,978.2
<b>TOTAL RESOURCES</b>	<b>\$ 7,992.2</b>	<b>\$ 46,835.4</b>	<b>\$ 55,736.1</b>	<b>\$ 19,756.5</b>	<b>\$ 5,830.5</b>	<b>\$ 5,622.3</b>	<b>\$ 5,627.7</b>	<b>\$ 5,633.2</b>	<b>\$ 5,638.8</b>	<b>\$ 109,141.8</b>
<b>EXPENDITURES:</b>										
Non-ROW Construction Related Costs	\$ 7,929.3	\$ 4,329.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,258.8
ROW/Construction Costs	\$ 62.9	\$ 5,531.1	\$ 39,809.7	\$ 13,931.3	\$ 213.6	\$ -	\$ -	\$ -	\$ -	\$ 59,548.6
Debt Service - Federal Funds*	\$ -	\$ -	\$ 5,282.6	\$ 5,282.6	\$ 5,282.6	\$ 5,282.6	\$ 5,282.6	\$ 5,282.6	\$ 5,282.6	\$ 36,978.2
<b>Total Expenditures</b>	<b>\$ 7,992.2</b>	<b>\$ 9,860.6</b>	<b>\$ 45,092.3</b>	<b>\$ 19,213.9</b>	<b>\$ 5,496.2</b>	<b>\$ 5,282.6</b>	<b>\$ 5,282.6</b>	<b>\$ 5,282.6</b>	<b>\$ 5,282.6</b>	<b>\$ 108,785.6</b>
<b>BALANCE</b>	<b>\$ -</b>	<b>\$ 36,974.7</b>	<b>\$ 10,643.8</b>	<b>\$ 542.7</b>	<b>\$ 334.3</b>	<b>\$ 339.7</b>	<b>\$ 345.1</b>	<b>\$ 350.6</b>	<b>\$ 356.2</b>	<b>\$ -</b>
	2011-12	2012-13	2013-14**	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Total
<b>RESOURCES:</b>										
Beginning Reserve	\$ 356.2	\$ 361.9	\$ 367.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Income - SMIF Earnings	\$ 5.7	\$ 5.8	\$ 5.9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17.4
Local Contribution	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Future RIP Commitment	\$ 5,282.6	\$ 5,282.6	\$ 5,282.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,847.8
<b>TOTAL RESOURCES</b>	<b>\$ 5,644.5</b>	<b>\$ 5,650.3</b>	<b>\$ 5,656.2</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 15,865.2</b>
<b>EXPENDITURES:</b>										
Debt Service - Federal Funds*	\$ 5,282.6	\$ 5,282.6	\$ 5,282.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,847.8
<b>Total Expenditures</b>	<b>\$ 5,282.6</b>	<b>\$ 5,282.6</b>	<b>\$ 5,282.6</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 15,847.8</b>
<b>BALANCE</b>	<b>\$ 361.9</b>	<b>\$ 367.7</b>	<b>\$ 373.6</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total
<b>RESOURCES:</b>										
Beginning Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Income - SMIF Earnings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>TOTAL RESOURCES</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>EXPENDITURES:</b>										
Debt Service - Federal Funds*	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>BALANCE</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

\* A rate of 4.50% was used in calculating the annual debt service payments over a 10-year term, based on a project need of \$40,901,000 with 2.0% added for costs of issuance.

\*\* Any excess funds, i.e., from investment income, could be used toward reducing the debt service payment.

**Santa Clara Valley Transportation Authority**  
**SR-87 South**  
**Level Debt Service**  
**4.50%, 10-Year Term**

Year	Coupon Rate	Principal	Semi-Annual Interest	Annual Interest	Annual Debt Service	Discount Factor	Present Value	Discounted Interest
8/1/2004	4.50%	\$ 3,401,635	\$ 940,500	\$ 1,881,000	\$ 5,282,635	0.978231976	\$ 1,840,054	
2/1/2005	4.50%	\$ 3,554,708	\$ 863,963	\$ 1,727,926	\$ 5,282,635	0.936107154	\$ 1,617,524	
2/1/2006	4.50%	\$ 3,714,670	\$ 783,982	\$ 1,567,965	\$ 5,282,635	0.89579632	\$ 1,404,577	
8/1/2006	4.50%	\$ 3,881,830	\$ 700,402	\$ 1,400,804	\$ 5,282,635	0.857221359	\$ 1,200,799	
2/1/2007	4.50%	\$ 4,056,513	\$ 613,061	\$ 1,226,122	\$ 5,282,635	0.82030752	\$ 1,005,797	
8/1/2007	4.50%	\$ 4,239,056	\$ 521,789	\$ 1,043,579	\$ 5,282,635	0.784983273	\$ 819,192	
2/1/2010	4.50%	\$ 4,429,813	\$ 426,411	\$ 852,821	\$ 5,282,635	0.751180165	\$ 640,623	
2/1/2011	4.50%	\$ 4,629,155	\$ 326,740	\$ 653,480	\$ 5,282,635	0.718832694	\$ 469,743	
2/1/2012	4.50%	\$ 4,837,467	\$ 222,584	\$ 445,168	\$ 5,282,635	0.687878176	\$ 306,221	
8/1/2013	4.50%	\$ 5,055,153	\$ 113,741	\$ 227,482	\$ 5,282,635	0.658256628	\$ 149,741	
2/1/2014								\$ 9,454,272
		\$ 41,800,000	\$ 11,026,347	\$ 11,026,347	\$ 52,826,347			

\*Principal amount includes project funding in the amount of \$40,901,000 plus 2.0% for costs of issuance.

**SANTA CLARA VTA -- SR-87 SOUTH**  
**Cost Of Inflation (Discounted at 4.50%)**

Years Project Delayed	Project Cost	Inflation Rate	Cost of Delay	Inflated Cost	Present Value	
					Discount Factor (4.50%)	Discounted Cost
1	71,807,390	3.50%	2,513,259	74,320,649	0.956938	2,405,032
2	74,320,649	3.50%	2,601,223	76,921,871	0.915730	2,382,018
3	76,921,871	3.50%	2,692,265	79,614,137	0.876297	2,359,223
4	79,614,137	3.50%	2,786,495	82,400,632	0.838561	2,336,647
5	82,400,632	3.50%	2,884,022	85,284,654	0.802451	2,314,287

Office of Transportation Economics - Average Annual Benefit/Cost Savings	\$ 3,265,000
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## LACMTA - PPNO 0162P Widen for HOV Lanes on Route 5

-- Summary Table --

### Analysis of GARVEE Financing and Benefits of Advancing the Project

Total Project Cost:	\$ 34,620,000	\$ 34,620,000	\$ 34,620,000	\$ 34,620,000
Amount Financed - GARVEE (1)	\$ 24,327,000	\$ 24,327,000	\$ 24,327,000	\$ 24,327,000
Coupon Rate (2)	4.50%	4.75%	4.75%	5.00%
Bond Term (Years)	10	10	10	10
<b>Total Discounted Interest Payments</b>	<b>\$ 5,502,251</b>	<b>\$ 5,778,968</b>	<b>\$ 6,052,798</b>	
Discounted Cost of Inflation - 4 Years (3)	3,445,383	3,429,016	3,412,778	
Discounted Congestion Reduction & Safety Benefits - 4 Years (4)	58,640,000	58,640,000	58,640,000	
Discounted Economic Benefits *	43,470,914	42,444,494	41,444,670	
Other Economic Benefit - Jobs Created *	273	273	273	273
<b>Total Benefits/Cost Avoidance</b>	<b>\$ 62,085,383</b>	<b>\$ 62,069,016</b>	<b>\$ 62,052,778</b>	
<b>Net (Cost) Benefits</b>	<b>\$ 56,583,132</b>	<b>\$ 56,290,048</b>	<b>\$ 55,999,981</b>	
		10 Year Term		
Estimated RIP Share of Annual Debt Service (100%)	3,074,418	3,112,323	3,150,458	
Estimated IIP Share of Annual Debt Service (0%)	0	0	0	
<b>Total Estimated Annual Debt Service Payment (5)</b>	<b>\$ 3,074,418</b>	<b>\$ 3,112,323</b>	<b>\$ 3,150,458</b>	
Average Annual County STIP Share (RIP) (6)	211,948,000	211,948,000	211,948,000	
RIP Share of Annual Debt Service	3,074,418	3,112,323	3,150,458	
<b>Average Remaining County Share After Payment of Debt Service</b>	<b>\$ 208,873,582</b>	<b>\$ 208,835,677</b>	<b>\$ 208,797,542</b>	

#### Assumptions:

- (1) This analysis is based on a principal amount of \$23.8 million plus 2% for costs of issuance.
- (2) Coupon rate is based on current market conditions.
- (3) Absent GARVEE bond financing, this project would be delayed for 4 years with an assumed 3.5% construction inflation rate.
- (4) Congestion reduction and safety benefits are provided by the Office of Transportation Economics.
- (5) Debt service payments will be comprised of 100% Federal RIP Share.
- (6) Average Annual County STIP Share, provided by Programming staff, is an estimate of the amount available at the beginning of the STIP cycle for debt service payments.

#### Other Benefits Not Included in this Analysis:

- # Improved quality of life - Environmental, and Social: Air, wetlands & water quality, noise, visual impact, and other social/neighborhood factors.
- # Expanded business activity as a result of improvement in traffic flow and access; and improved property value due to land development and better land use.
- \* Non-Add. For information only. Without GARVEE proceeds, the realization of these benefits would be delayed until other fund sources become available, consistent with the above assumptions.

Every \$100 million invested in transportation creates an average of 790 jobs.  
The economic multiplier of each \$100 million invested in transportation is equivalent to \$195 million in economic benefits gained.

**STIP Programming for Debt Service**  
**LACMTA - PPNO 0162P Widen for HOV Lanes on Route 5**  
 (In Thousands)

Programming Summary						
Principal Amount						\$ 23,850
Costs of Issuance (2%)						\$ 477
Total Principal Amount						\$ 24,327
Interest						\$ 6,417
Total Amount Financed						\$ 30,744
						\$ 30,744 Total Programming

	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	Total
Required Programming											
Current STIP - RIP*	3,074.4	3,074.4	3,074.4	3,074.4							\$ 9,223
Future STIP - IIP*		\$ -	\$ -	\$ -							\$ -
Future STIP - RIP*					3,074.4	3,074.4	3,074.4	3,074.4	3,074.4	3,074.4	\$ 21,521
Future STIP - IIP*											\$ -
<b>Total Debt Service Payments</b>	<b>\$ 3,074</b>	<b>\$ 30,744</b>									

\*RIP and IIP percentages as programmed -- 100% and 0% respectively.

**LACMTA - PPNO 0162P Widen for HOV Lanes on Route 5**

**Cash Flow Analysis**

**(\$ in Thousands)**

Cash Flow Analysis

(\$ in thousands)

**LACMTA**  
**Debt Service Schedule**  
**10-Year Term, 4.50% Coupon Rate**

Year	Coupon Rate	Principal*	Semi-Annual Interest	Annual Interest	Annual Debt Service	Present Value	
						Discount Factor	Discounted Interest
7/1/2004			\$ 547,358	\$ 1,094,715	\$ 3,074,418	0.978231976	\$ 1,070,885
1/1/2005	4.50%	\$ 1,979,703	\$ 547,358	\$ 1,094,715	\$ 3,074,418	0.936107154	\$ 941,376
7/1/2005			\$ 502,814	\$ 1,005,628	\$ 3,074,418	0.89579632	\$ 817,444
1/1/2006	4.50%	\$ 2,068,789	\$ 502,814	\$ 1,005,628	\$ 3,074,418	0.857221359	\$ 698,848
7/1/2006			\$ 456,266	\$ 912,533	\$ 3,074,418	0.82030752	\$ 585,359
1/1/2007	4.50%	\$ 2,161,885	\$ 456,266	\$ 912,533	\$ 3,074,418	0.784983273	\$ 476,758
7/1/2007			\$ 407,624	\$ 815,248	\$ 3,074,418	0.751180165	\$ 372,833
1/1/2008	4.50%	\$ 2,259,170	\$ 407,624	\$ 815,248	\$ 3,074,418	0.718832694	\$ 273,384
7/1/2008			\$ 356,793	\$ 713,585	\$ 3,074,418	0.6877878176	\$ 178,216
1/1/2009	4.50%	\$ 2,360,832	\$ 356,793	\$ 713,585	\$ 3,074,418	0.658256628	\$ 87,147
7/1/2009			\$ 303,674	\$ 607,348	\$ 3,074,418		
1/1/2010	4.50%	\$ 2,467,070	\$ 303,674	\$ 607,348	\$ 3,074,418		
7/1/2010			\$ 248,165	\$ 496,330	\$ 3,074,418		
1/1/2011	4.50%	\$ 2,578,088	\$ 248,165	\$ 496,330	\$ 3,074,418		
7/1/2011			\$ 190,158	\$ 380,316	\$ 3,074,418		
1/1/2012	4.50%	\$ 2,694,102	\$ 190,158	\$ 380,316	\$ 3,074,418		
7/1/2012			\$ 129,541	\$ 259,081	\$ 3,074,418		
1/1/2013	4.50%	\$ 2,815,336	\$ 129,541	\$ 259,081	\$ 3,074,418		
7/1/2013			\$ 66,196	\$ 132,391	\$ 3,074,418		
1/1/2014	4.50%	\$ 2,942,026	\$ 66,196	\$ 132,391	\$ 3,074,418		
		\$ 24,327,000	\$ 6,417,176	\$ 6,417,176	\$ 30,744,176		
							\$ 5,502,251

\*Includes a principal amount of \$23,850,000 million plus 2% for costs of issuance.

## Cost Of Inflation

Years Project Delayed	Project Cost	Inflation Rate	Cost of Delay	Inflated Cost	Present Value	Discount Factor (4.50%)	Discounted Cost
1	\$ 34,620,000	3.50%	1,211,700	\$ 35,831,700	0.956938	1,159,522	
2	\$ 35,831,700	3.50%	1,254,110	\$ 37,085,810	0.915730	1,148,426	
3	\$ 37,085,810	3.50%	1,298,003	\$ 38,383,813	0.876297	1,137,436	
4	\$ 38,383,813	3.50%	1,343,433	\$ 39,727,246	0.838561	1,126,551	
5	\$ 39,727,246	3.50%	1,390,454	\$ 41,117,700	0.802451	1,115,771	

Economic Benefits		
	Investment	Economic Effect
Economic Multiplier	\$ 100,000,000	\$ 195,000,000
Jobs Created	\$ 100,000,000	790

Office of Transportation Economics - Average Annual Benefit/Cost Savings	\$ 14,660,000
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## LACMTA - PPNO 0391A HOV Lanes From Pearlblossom to Ave. P-8

ATTACHMENT 4  
PAGE 1 OF 5

-- Summary Table --

### Analysis of GARVEE Financing and Benefits of Advancing the Project

Total Project Cost:	\$	40,834,000	\$	40,834,000	\$	40,834,000
Amount Financed - GARVEE (1)		31,340,000		31,340,000		31,340,000
Coupon Rate (2)		4.50%		4.75%		5.00%
Bond Term (Years)		10		10		10
Total Discounted Interest Payments	\$	7,088,442	\$	7,444,931	\$	7,797,701
Discounted Cost of Inflation - 4 Years (3)		4,063,800		4,044,496		4,025,343
Discounted Congestion Reduction & Safety Benefits - 4 Years (4)		9,500,000		9,500,000		9,500,000
Discounted Economic Benefits *		51,273,579		50,062,925		48,883,641
Other Economic Benefit - Jobs Created *		323		323		323
Total Benefits/Cost Avoidance	\$	13,563,800	\$	13,544,496	\$	13,525,343
Net (Cost) Benefits	\$	6,475,358	\$	6,099,564	\$	5,727,642
				10 Year Term		
Estimated RIP Share of Annual Debt Service (100%)		3,960,712		4,009,545		4,058,673
Estimated IIP Share of Annual Debt Service (0%)		0		0		0
Total Estimated Annual Debt Service Payment (5)	\$	3,960,712	\$	4,009,545	\$	4,058,673
Average Annual County STIP Share (RIP) (6)		211,948,000		211,948,000		211,948,000
RIP Share of Annual Debt Service		3,960,712		4,009,545		4,058,673
Average Remaining County Share After Payment of Debt Service	\$	207,987,288	\$	207,938,455	\$	207,889,327

#### Assumptions:

- (1) This analysis is based on a principal amount of \$30.7 million plus 2% for costs of issuance.
- (2) Coupon rate is based on current market conditions.
- (3) Absent GARVEE bond financing, this project would be delayed for 4 years with an assumed 3.5% construction inflation rate.
- (4) Congestion reduction and safety benefits are provided by the Office of Transportation Economics.
- (5) Debt service payments will be comprised of 100% Federal RIP Share.
- (6) Average Annual County STIP Share, provided by Programming staff, is an estimate of the amount available at the beginning of the STIP cycle for debt service payments.

#### Other Benefits Not Included in this Analysis:

- # Improved quality of life - Environmental, and Social: Air, wetlands & water quality, noise, visual impact, and other social/neighborhood factors.
- # Expanded business activity as a result of improvement in traffic flow and access; and improved property value due to land development and better land use.

- \* Non-Add. For information only. Without GARVEE proceeds, the realization of these benefits would be delayed until other fund sources become available, consistent with the above assumptions.

Every \$100 million invested in transportation creates an average of 790 jobs.  
The economic multiplier of each \$100 million invested in transportation is equivalent to \$195 million in economic benefits gained.

**STIP Programming for Debt Service**  
**LACMTA - PPNO 0391A HOV Lanes From Pearblossom to Ave. P-8**  
 (In Thousands)

<b>Programming Summary</b>						
Principal Amount	\$ 30,725					
Costs of Issuance (2%)	\$ 615					
Total Principal Amount	<b>\$ 31,340</b>					
Interest	\$ 8,267					
Total Amount Financed	<b>\$ 39,607</b>					

	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	Total
<b>Required Programming</b>											
											\$ -
											\$ -
											\$ -
											\$ -
Future STIP - RIP*	3,960.7	3,960.7	3,960.7	3,960.7	3,960.7	3,960.7	3,960.7	3,960.7	3,960.7	3,960.7	39,607.0
Future STIP - IIP*											
<b>Total Debt Service Payments</b>	<b>3,960.7</b>	<b>39,607.0</b>									

\*RIP and IIP percentages as programmed -- 100% and 0% respectively.

**LACMTA - PPNO 0391A HOV Lanes From Pearblossom to Ave. P-8  
Cash Flow Analysis**

**LACMTA**  
**Debt Service Schedule**  
**10-Year Term, 4.50% Coupon Rate**

Year	Coupon Rate	Principal*	Semi-Annual Interest	Annual Interest	Annual Debt Service	Discount Factor	Present Value	Discounted Interest
7/1/2004			\$ 705,150	\$ 1,410,300	\$ 3,960,712	0.978231976	\$ 1,379,601	
1/1/2005	4.50%	\$ 2,550,412	\$ 705,150	\$ 1,410,300	\$ 3,960,712	0.936107154	\$ 1,212,756	
7/1/2005			\$ 647,766	\$ 1,295,531	\$ 3,960,712			
1/1/2006	4.50%	\$ 2,665,181	\$ 647,766	\$ 1,295,531	\$ 3,960,712			
7/1/2006			\$ 587,799	\$ 1,175,598	\$ 3,960,712	0.89579632	\$ 1,053,097	
1/1/2007	4.50%	\$ 2,785,114	\$ 587,799	\$ 1,175,598	\$ 3,960,712			
7/1/2007			\$ 525,134	\$ 1,050,268	\$ 3,960,712	0.857221359	\$ 900,312	
1/1/2008	4.50%	\$ 2,910,444	\$ 525,134	\$ 1,050,268	\$ 3,960,712			
7/1/2008			\$ 459,649	\$ 919,298	\$ 3,960,712	0.82030752	\$ 754,107	
1/1/2009	4.50%	\$ 3,041,414	\$ 459,649	\$ 919,298	\$ 3,960,712			
7/1/2009			\$ 391,217	\$ 782,435	\$ 3,960,712	0.784983273	\$ 614,198	
1/1/2010	4.50%	\$ 3,178,278	\$ 391,217	\$ 782,435	\$ 3,960,712			
7/1/2010			\$ 319,706	\$ 639,412	\$ 3,960,712	0.751180165	\$ 480,314	
1/1/2011	4.50%	\$ 3,321,300	\$ 319,706	\$ 639,412	\$ 3,960,712			
7/1/2011			\$ 244,977	\$ 489,954	\$ 3,960,712	0.718832694	\$ 352,195	
1/1/2012	4.50%	\$ 3,470,759	\$ 244,977	\$ 489,954	\$ 3,960,712			
7/1/2012			\$ 166,885	\$ 333,769	\$ 3,960,712	0.6877878176	\$ 229,593	
1/1/2013	4.50%	\$ 3,626,943	\$ 166,885	\$ 333,769	\$ 3,960,712			
7/1/2013			\$ 85,278	\$ 170,557	\$ 3,960,712	0.658256628	\$ 112,270	
1/1/2014	4.50%	\$ 3,790,155	\$ 85,278	\$ 170,557	\$ 3,960,712			
								\$ 7,088,442
		\$ 31,340,000	\$ 8,267,123	\$ 8,267,123	\$ 39,607,123			

\*Includes a principal amount of \$30,725,000 million plus 2% for costs of issuance.

## Cost Of Inflation

Years Project Delayed	Project Cost	Inflation Rate	Cost of Delay	Inflated Cost	Present Value	
					Discount Factor (4.50%)	Discounted Cost
1	<b>40,834,000</b>	3.50%	1,429,190	42,263,190	0.956938	1,367,646
2	42,263,190	3.50%	1,479,212	43,742,402	0.915730	1,354,558
3	43,742,402	3.50%	1,530,984	45,273,386	0.876297	1,341,596
4	45,273,386	3.50%	1,584,568	46,857,954	0.838561	1,328,758
5	46,857,954	3.50%	1,640,028	48,497,983	0.802451	1,316,043

Economic Benefits	
Investment	Economic Effect
\$ 100,000,000	\$ 195,000,000

Office of Transportation Economics - Average Annual Benefit/Cost Savings	\$ 2,375,000
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# LACMTA - PPNO #2012A - LA - Extension (Playa Vista Access)

## -- Summary Table --

### Analysis of GARVEE Financing and Benefits of Advancing the Project

<b>Total Project Cost:</b>	\$	<b>18,527,000</b>	\$	<b>18,527,000</b>	\$	<b>18,527,000</b>
Amount Financed - GARVEE <sup>(1)</sup>		11,646,000		11,646,000		11,646,000
Coupon Rate <sup>(2)</sup>		4.50%		4.75%		5.00%
Bond Term (Years)		10		10		10
<b>Total Discounted Interest Payments</b>	\$	<b>2,634,078</b>	\$	<b>2,766,550</b>	\$	<b>2,897,640</b>
Discounted Cost of Inflation - 4 Years <sup>(3)</sup>		1,843,807		1,835,049		1,826,359
Discounted Congestion Reduction & Safety Benefits - 4 Years <sup>(4)</sup>		1,460,000		1,460,000		1,460,000
Discounted Economic Benefits *		23,263,594		22,714,302		22,179,243
Other Economic Benefit - Jobs Created *		146		146		146
<b>Total Benefits/Cost Avoidance</b>	\$	<b>3,303,807</b>	\$	<b>3,295,049</b>	\$	<b>3,286,359</b>
<b>Net (Cost) Benefits</b>	\$	<b>669,730</b>	\$	<b>528,499</b>	\$	<b>388,719</b>
				10 Year Term		
Estimated RIP Share of Annual Debt Service (100%)		1,471,808		1,489,954		1,508,210
Estimated IIP Share of Annual Debt Service (0%)		0		0		0
<b>Total Estimated Annual Debt Service Payment</b> <sup>(5)(6)</sup>	\$	<b>1,471,808</b>	\$	<b>1,489,954</b>	\$	<b>1,508,210</b>
Average Annual County STIP Share (RIP) <sup>(7)</sup>		211,948,000		211,948,000		211,948,000
RIP Share of Annual Debt Service		1,471,808		1,489,954		1,508,210
<b>Average Remaining County Share After Payment of Debt Service</b>	\$	<b>210,476,192</b>	\$	<b>210,458,046</b>	\$	<b>210,439,790</b>

#### Assumptions:

- (1) This analysis is based on a principal amount of \$11,418,000 plus 2% for costs of issuance.
- (2) Coupon rate is based on current market conditions.
- (3) Absent GARVEE bond financing, this project would be delayed for 4 years with an assumed 3.5% construction inflation rate.
- (4) Congestion reduction and safety benefits are provided by the Office of Transportation Economics.
- (5) Debt service payments will be comprised of 100% Federal RIP Share and 0% Federal IIP Share.
- (6) Programming in the current STIP will be necessary to make debt service payments through FY 2006-2007, with future STIP programming also required for the remaining payments through 2013-2014.
- (7) Average Annual County STIP Share, provided by Programming staff, is an estimate of the amount available at the beginning of the STIP cycle for debt service payments.

#### Other Benefits Not Included in this Analysis:

- # Improved quality of life - Environmental, and Social: Air, wetlands & water quality, noise, visual impact, and other social/neighborhood factors.
- # Expanded business activity as a result of improvement in traffic flow and access; and improved property value due to land development and better land use.

\* Non-Add. For information only. Without GARVEE proceeds, the realization of these benefits would be delayed until other fund sources become available, consistent with the above assumptions.

Every \$100 million invested in transportation creates an average of 790 jobs.  
The economic multiplier of each \$100 million invested in transportation is equivalent to \$195 million in economic benefits gained.

**STIP Programming for Debt Service**  
**LACMTA - PPNO #2012A - LA-90 Extension (Playa Vista Access)**  
 (In Thousands)

Programming Summary						
Principal Amount						\$ 11,418
Costs of Issuance (2%)						\$ 228
Total Principal Amount						\$ 11,646
Interest						\$ 3,072
Total Amount Financed						\$ 14,718
						\$ 14,718.0 Total Programming

Required Programming	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	Total
Current STIP - RIP*													4,415.4
Current STIP - IIP*													-
Future STIP - RIP*													10,302.6
Future STIP - IIP*													-
<b>Total Debt Service Payments</b>	<b>1,471.8</b>	<b>14,718.0</b>											

\*RIP and IIP percentages as programmed --100% and 0% respectively.

## LACMTA - PPNO #2012A - LA-90 Extension (Playa Vista Access) Cash Flow Analysis

(\$ in Thousands)

**LA MTA - PPNO 2012A - LA-90 Extension (Playa Vista Access)**  
**Debt Service Schedule**  
**10-Year Term, 4.75% Coupon Rate**

Year	Coupon Rate	Principal*	Semi-Annual Interest	Annual Interest	Annual Debt Service	Discount Factor	Present Value	Discounted Interest
7/1/2004			\$ 262,035	\$ 524,070	\$ 1,471,808	0.978231976	\$	\$ 512,662
1/1/2005	4.50%	\$ 947,738	\$ 262,035	\$ 524,070	\$ 1,471,808	0.936107154	\$	\$ 450,662
7/1/2005			\$ 240,711	\$ 481,422	\$ 1,471,808			
1/1/2006	4.50%	\$ 990,386	\$ 240,711	\$ 481,422	\$ 1,471,808			
7/1/2006			\$ 218,427	\$ 436,854	\$ 1,471,808	0.89579632	\$	\$ 391,333
1/1/2007	4.50%	\$ 1,034,953	\$ 218,427	\$ 436,854	\$ 1,471,808			
7/1/2007			\$ 195,141	\$ 390,282	\$ 1,471,808	0.857221359	\$	\$ 334,558
1/1/2008	4.50%	\$ 1,081,526	\$ 195,141	\$ 390,282	\$ 1,471,808			
7/1/2008			\$ 170,806	\$ 341,613	\$ 1,471,808	0.82030752	\$	\$ 280,228
1/1/2009	4.50%	\$ 1,130,195	\$ 170,806	\$ 341,613	\$ 1,471,808			
7/1/2009			\$ 145,377	\$ 290,754	\$ 1,471,808	0.784983273	\$	\$ 228,237
1/1/2010	4.50%	\$ 1,181,054	\$ 145,377	\$ 290,754	\$ 1,471,808			
7/1/2010			\$ 118,803	\$ 237,607	\$ 1,471,808	0.751180165	\$	\$ 178,485
1/1/2011	4.50%	\$ 1,234,201	\$ 118,803	\$ 237,607	\$ 1,471,808			
7/1/2011			\$ 91,034	\$ 182,068	\$ 1,471,808	0.718832694	\$	\$ 130,876
1/1/2012	4.50%	\$ 1,289,740	\$ 91,034	\$ 182,068	\$ 1,471,808			
7/1/2012			\$ 62,015	\$ 124,029	\$ 1,471,808	0.687878176	\$	\$ 85,317
1/1/2013	4.50%	\$ 1,347,778	\$ 62,015	\$ 63,379	\$ 1,471,808	0.658256628	\$	\$ 41,720
7/1/2013			\$ 31,690	\$ 31,690	\$ 1,471,808			
1/1/2014	4.50%	\$ 1,408,428	\$ 31,690	\$ 3,072,078	\$ 14,718,078			
							\$	\$ 2,634,078

\*Includes a principal amount of \$11,418,000 plus 2% for costs of issuance.

## Cost Of Inflation

Years Project Delayed	Project Cost	Inflation Rate	Cost of Delay	Inflated Cost	Present Value	
					Discount Factor (4.50%)	Discounted Cost
1	<b>18,527,000</b>	3.50%	648,445	19,175,445	0.956938	620,522
2	19,175,445	3.50%	671,141	19,846,586	0.915730	614,584
3	19,846,586	3.50%	694,630	20,541,216	0.876297	608,702
4	20,541,216	3.50%	718,943	21,260,159	0.838561	602,877
5	21,260,159	3.50%	744,106	22,004,264	0.802451	597,108

<b>Economic Benefits</b>	
Investment	Economic Effect
\$ 100,000,000	\$ 195,000,000
Jobs Created	790

Office of Transportation Economics - Average Annual Benefit/Cost Savings	\$ 365,000
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-- Summary Table --  
**Analysis of GARVEE Financing  
and Benefits of Advancing the Project**

<b>Total Project Cost:</b>	\$ 45,123,000	\$ 45,123,000	\$ 45,123,000	\$ 45,123,000
Amount Financed - GARVEE <sup>(1)</sup>	\$ 29,021,000	\$ 29,021,000	\$ 29,021,000	\$ 29,021,000
Coupon Rate <sup>(2)</sup>	4.50%	4.75%	4.75%	5.00%
Bond Term (Years) <sup>(3)</sup>	10	10	10	10
<b>Total Discounted Interest Payments</b>	<b>\$ 6,563,934</b>	<b>\$ 6,894,044</b>	<b>\$ 7,220,711</b>	
Discounted Cost of Inflation - 4 Years <sup>(3)</sup>	4,490,642	4,469,309	4,448,146	
Discounted Congestion Reduction & Safety Benefits - 4 Years <sup>(4)</sup>	6,700,000	6,700,000	6,700,000	
Discounted Economic Benefits *	56,659,100	55,321,285	54,018,135	
Other Economic Benefit - Jobs Created *	356	356	356	356
<b>Total Benefits/Cost Avoidance</b>	<b>\$ 11,190,642</b>	<b>\$ 11,169,309</b>	<b>\$ 11,148,146</b>	
<b>Net (Cost) Benefits</b>	<b>\$ 4,626,708</b>	<b>\$ 4,275,265</b>	<b>\$ 3,927,434</b>	
				10 Year Term
Estimated RIP Share of Annual Debt Service (76%)	2,787,406	2,821,773	2,856,348	
Estimated IIP Share of Annual Debt Service (24%)	880,234	891,086	902,005	
<b>Total Estimated Annual Debt Service Payment <sup>(5)(6)</sup></b>	<b>\$ 3,667,640</b>	<b>\$ 3,712,859</b>	<b>\$ 3,758,352</b>	
Average Annual County STIP Share (RIP) <sup>(7)</sup>	211,948,000	211,948,000	211,948,000	
RIP Share of Annual Debt Service	2,787,406	2,821,773	2,856,348	
<b>Average Remaining County Share After Payment of Debt Service</b>	<b>\$ 209,160,594</b>	<b>\$ 209,126,227</b>	<b>\$ 209,091,652</b>	

**Assumptions:**

- (1) This analysis is based on a principal amount of \$28.4 million plus 2% for costs of issuance.
- (2) Coupon rate is based on current market conditions.
- (3) Absent GARVEE bond financing, this project would be delayed for 4 years with an assumed 3.5% construction inflation rate.
- (4) Congestion reduction and safety benefits are provided by the Office of Transportation Economics.
- (5) Debt service payments will be comprised of 76% Federal RIP Share and 24% Federal IIP Share.
- (6) Programming in the current STIP will be necessary to make debt service payments through FY 2006-2007, and future STIP programming will also be required for the remaining payments through 2013-2014.
- (7) Average Annual County STIP Share, provided by Programming staff, is an estimate of the amount available at the beginning of the STIP cycle for debt service payments.

**Other Benefits Not Included in this Analysis:**

- # Improved quality of life - Environmental, and Social: Air, wetlands & water quality, noise, visual impact, and other social/neighborhood factors.
- # Expanded business activity as a result of improvement in traffic flow and access; and improved property value due to land development and better land use.

\* Non-Add. For information only. Without GARVEE proceeds, the realization of these benefits would be delayed until other fund sources become available, consistent with the above assumptions.

Every \$100 million invested in transportation creates an average of 790 jobs.

The economic multiplier of each \$100 million invested in transportation is equivalent to \$195 million in economic benefits gained.

**STIP Programming for Debt Service**  
**LACMTA - PPNO # 2333 - Auxiliary Lane, Rt. 10-Waterford**  
 (In Thousands)

Programming Summary						
Principal Amount	\$ 28,452					
Costs of Issuance (2%)	\$ 569					
Total Principal Amount	\$ 29,021					
Interest	\$ 7,655					
Total Amount Financed	\$ 36,676					
	\$ 36,676					

Required Programming	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	Total
Current STIP - RIP*	2,787.4	2,787.4	2,787.4										8,362.2
Current STIP - IIP*													2,640.6
Future STIP - RIP*													19,511.8
Future STIP - IIP*													6,161.4
<b>Total Debt Service Payments</b>	<b>3,667.6</b>	<b>36,676.0</b>											

\*RIP and IIP percentages as programmed -- 76% and 24% respectively.

**LACMTA - PPNO # 2333 - Auxiliary Lane, Rt. 10-Waterford**  
**Cash Flow Analysis** (\$ in Thousands)

**LA MTA - PPNO 2333 - AUXILIARY LANE, RT. 10-WATERFORD**  
**Debt Service Schedule**  
**10-Year Term, 4.50% Coupon Rate**

Year	Coupon Rate	Principal*	Semi-Annual Interest	Annual Interest	Annual Debt Service	Discount Factor	Present Value	Discounted Interest
7/1/2004			\$ 652,973	\$ 1,305,945	\$ 3,667,640	0.978231976	\$ 1,277,517	
1/1/2005	4.50%	\$ 2,361,695	\$ 652,973	\$ 1,305,945	\$ 3,667,640	0.936107154	\$ 1,123,018	
7/1/2005			\$ 599,834	\$ 1,199,669	\$ 3,667,640	0.89579632	\$ 975,173	
1/1/2006	4.50%	\$ 2,467,971	\$ 599,834	\$ 1,199,669	\$ 3,667,640	0.857221359	\$ 833,694	
7/1/2006			\$ 544,305	\$ 1,088,610	\$ 3,667,640	0.82030752	\$ 698,307	
1/1/2007	4.50%	\$ 2,579,030	\$ 544,305	\$ 1,088,610	\$ 3,667,640	0.784983273	\$ 568,751	
7/1/2007			\$ 486,277	\$ 972,554	\$ 3,667,640	0.751180165	\$ 444,773	
1/1/2008	4.50%	\$ 2,695,086	\$ 486,277	\$ 972,554	\$ 3,667,640	0.718832694	\$ 326,134	
7/1/2008			\$ 425,637	\$ 851,275	\$ 3,667,640	0.687878176	\$ 212,604	
1/1/2009	4.50%	\$ 2,816,365	\$ 425,637	\$ 851,275	\$ 3,667,640	0.658256628	\$ 103,963	
7/1/2009			\$ 362,269	\$ 724,538	\$ 3,667,640		\$ 6,563,934	
1/1/2010	4.50%	\$ 2,943,101	\$ 362,269	\$ 724,538	\$ 3,667,640			
7/1/2010			\$ 296,049	\$ 592,099	\$ 3,667,640			
1/1/2011	4.50%	\$ 3,075,541	\$ 296,049	\$ 592,099	\$ 3,667,640			
7/1/2011			\$ 226,850	\$ 453,699	\$ 3,667,640			
1/1/2012	4.50%	\$ 3,213,940	\$ 226,850	\$ 453,699	\$ 3,667,640			
7/1/2012			\$ 154,536	\$ 309,072	\$ 3,667,640			
1/1/2013	4.50%	\$ 3,358,568	\$ 154,536	\$ 309,072	\$ 3,667,640			
7/1/2013			\$ 78,968	\$ 157,937	\$ 3,667,640			
1/1/2014	4.50%	\$ 3,509,703	\$ 78,968	\$ 157,937	\$ 3,667,640			
		\$ 29,021,000	\$ 7,655,398	\$ 7,655,398	\$ 36,676,398			

\*Includes principal amount of \$28,452,000 plus 2% for costs of issuance.

## Cost Of Inflation

Years Project Delayed	Project Cost	Inflation Rate	Cost of Delay	Inflated Cost	Present Value	
					Discount Factor (4.5%)	Discounted Cost
1	\$ 45,123,000	3.50%	\$ 1,579,305	\$ 46,702,305	0.956938	\$ 1,511,297
2	\$ 46,702,305	3.50%	\$ 1,634,581	\$ 48,336,886	0.915730	\$ 1,496,834
3	\$ 48,336,886	3.50%	\$ 1,691,791	\$ 50,028,677	0.876297	\$ 1,482,511
4	\$ 50,028,677	3.50%	\$ 1,751,004	\$ 51,779,680	0.838561	\$ 1,468,324
5	\$ 51,779,680	3.50%	\$ 1,812,289	\$ 53,591,969	0.802451	\$ 1,454,273

## Economic Benefits

	Investment	Economic Effect
Economic Multiplier	\$ 100,000,000	\$ 195,000,000
Jobs Created	\$ 100,000,000	790

Office of Transportation Economics - Average Annual Benefit/Cost Savings	\$ 1,675,000
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**LACMTA - PPNO # 2336 - NB 405 Gap Closure**

-- Summary Table --

**Analysis of GARVEE Financing  
and Benefits of Advancing the Project**

<b>Total Project Cost:</b>	\$ 38,911,000	\$ 38,911,000	\$ 38,911,000
Amount Financed - GARVEE (1)	\$ 25,919,000	\$ 25,919,000	\$ 25,919,000
Coupon Rate (2)	4.50%	4.75%	5.00%
Bond Term (Years)	10	10	10
<b>Total Discounted Interest Payments</b>	\$ 5,862,327	\$ 6,157,153	\$ 6,448,903
Discounted Cost of Inflation - 4 Years (3)	\$ 3,872,435	\$ 3,854,039	\$ 3,835,789
Discounted Congestion Reduction & Safety Benefits - 4 Years (4)	\$ 18,240,000	\$ 18,240,000	\$ 18,240,000
Discounted Economic Benefits *	\$ 48,859,086	\$ 47,705,442	\$ 46,581,691
Other Economic Benefit - Jobs Created *	\$ 307	\$ 307	\$ 307
<b>Total Benefits/Cost Avoidance</b>	\$ 22,112,435	\$ 22,094,039	\$ 22,075,789
<b>Net (Cost) Benefits</b>	\$ 16,250,107	\$ 15,936,886	\$ 15,626,885
		10 Year Term	
Estimated RIP Share of Annual Debt Service (66%)	\$ 2,161,904	\$ 2,188,559	\$ 2,215,375
Estimated IIP Share of Annual Debt Service (34%)	\$ 1,113,708	\$ 1,127,440	\$ 1,141,254
<b>Total Estimated Annual Debt Service Payment (5)(6)</b>	\$ 3,275,613	\$ 3,315,999	\$ 3,356,629
Average Annual County STIP Share (RIP) (7)	\$ 211,948,000	\$ 211,948,000	\$ 211,948,000
RIP Share of Annual Debt Service	\$ 2,161,904	\$ 2,188,559	\$ 2,215,375
<b>Average Remaining County Share After Payment of Debt Service</b>	\$ 209,786,096	\$ 209,759,441	\$ 209,732,625

**Assumptions:**

- (1) This analysis is based on a principal amount of \$25.4 million plus 2% for costs of issuance.
- (2) Coupon rate is based on current market conditions.
- (3) Absent GARVEE bond financing, this project would be delayed for 4 years with an assumed 3.5% construction inflation rate.
- (4) Congestion reduction and safety benefits are provided by the Office of Transportation Economics.
- (5) Debt service payments will be comprised of 66% Federal RIP Share and 34% Federal IIP Share.
- (6) Programming in the current STIP be necessary to make debt service payments through FY 2006-2007, and future STIP programming will also be required for the remaining payments through 2013-2014.
- (7) Average Annual County STIP Share, provided by Programming staff, is an estimate of the amount available at the beginning of the STIP cycle for debt service payments.

**Other Benefits Not Included in this Analysis:**

- # Improved quality of life - Environmental, and Social: Air, wetlands & water quality, noise, visual impact, and other social/neighborhood factors.
- # Expanded business activity as a result of improvement in traffic flow and access; and improved property value due to land development and better land use.

- \* **Non-Add. For information only. Without GARVEE proceeds, the realization of these benefits would be delayed until other fund sources become available, consistent with the above assumptions.**

Every \$100 million invested in transportation creates an average of 790 jobs.

The economic multiplier of each \$100 million invested in transportation is equivalent to \$195 million in economic benefits gained.

**STIP Programming for Debt Service**  
**LACMTA - PPNO # 2336 - NB 405 Gap Closure**  
 (In Thousands)

Programming Summary						
Principal Amount	\$ 25,411					
Costs of Issuance (2%)	\$ 508					
Total Principal Amount	<b>\$ 25,919</b>					
Interest	\$ 6,837					
Total Amount Financed	<b>\$ 32,756</b>					
		\$ 3,275.6 Annual Programming				
		\$ 9,826.8 FY 03/04 through FY 06/07				
		\$ 22,929.2 FY 07/08 through FY 13/14				
		<b>\$ 32,756.0 Total Programming</b>				

Required Programming	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	Total
Current STIP - RIP*													\$ 6,485.7
Current STIP - IIP*													\$ 3,341.1
Future STIP - RIP*													\$ 15,133.3
Future STIP - IIP*													\$ 7,795.9
<b>Total Debt Service Payments</b>	<b>\$ 3,275.6</b>	<b>\$ 32,756.0</b>											

\*RIP and IIP percentages as programmed -- 66% and 34% respectively.

## LACMTA - PPNO # 2336 - NB 405 Gap Closure Cash Flow Analysis

(\$ in thousands)

**LACMTA - PPNO # 2336 - NB 405 Gap Closure  
Debt Service Schedule  
10-Year Term, 4.50% Coupon Rate**

Year	Coupon Rate	Principal*	Semi-Annual Interest	Annual Interest	Annual Debt Service	Discount Factor	Present Value	Discounted Interest
7/1/2004	4.50%	\$ 2,109,258	\$ 583,178	\$ 1,166,355	\$ 3,275,613	0.978231976	\$ 1,140,966	
1/1/2005	4.50%	\$ 2,204,174	\$ 535,719	\$ 1,071,438	\$ 3,275,613	0.936107154	\$ 1,002,981	
1/1/2006	4.50%	\$ 2,303,362	\$ 486,125	\$ 972,251	\$ 3,275,613	0.89579632	\$ 870,938	
1/1/2007	4.50%	\$ 2,407,013	\$ 434,300	\$ 868,599	\$ 3,275,613	0.857221359	\$ 744,582	
1/1/2008	4.50%	\$ 2,515,329	\$ 380,142	\$ 760,284	\$ 3,275,613	0.82030752	\$ 623,666	
1/1/2009	4.50%	\$ 2,628,519	\$ 323,547	\$ 647,094	\$ 3,275,613	0.784983273	\$ 507,958	
1/1/2010	4.50%	\$ 2,746,802	\$ 264,405	\$ 528,811	\$ 3,275,613	0.751180165	\$ 397,232	
1/1/2011	4.50%	\$ 2,870,408	\$ 202,602	\$ 405,204	\$ 3,275,613	0.718832694	\$ 291,274	
1/1/2012	4.50%	\$ 2,999,577	\$ 138,018	\$ 276,036	\$ 3,275,613	0.6877878176	\$ 189,879	
1/1/2013	4.50%	\$ 3,134,558	\$ 70,528	\$ 141,055	\$ 3,275,613	0.658256628	\$ 92,850	
1/1/2014								\$ 5,862,327
		\$ 25,919,000	\$ 6,837,127	\$ 6,837,127	\$ 32,756,127			

\*Includes a principal amount of \$25,411,000 plus 2% for costs of issuance.

## Cost Of Inflation

Years Project Delayed	Project Cost	Inflation Rate	Cost of Delay	Inflated Cost	Present Value	
					Discount Factor (4.50%)	Discounted Cost
1	<b>\$ 38,911,111</b>	3.50%	1,361,889	40,273,000	0.956938	1,303,243
2	40,273,000	3.50%	1,409,555	41,682,555	0.915730	1,290,772
3	41,682,555	3.50%	1,458,889	43,141,444	0.876297	1,278,420
4	43,141,444	3.50%	1,509,951	44,651,395	0.838561	1,266,186
5	44,651,395	3.50%	1,562,799	46,214,194	0.802451	1,254,070

Economic Benefits	
Investment	Economic Effect
\$ 100,000,000	\$ 195,000,000
Jobs Created	790

Office of Transportation Economics - Average Annual Benefit/Cost Savings	\$ 4,560,000
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-- Summary Table --  
**SHOPP I-80 Auburn Rehab Project**  
**Sensitivity Analysis of GARVEE Financing**  
**and Benefits of Advancing the Project**

Total Project Cost: <sup>(a)</sup>	\$ 64,300,000	\$ 64,300,000	\$ 64,300,000	\$ 64,300,000
Amount Financed - GARVEE <sup>(1)</sup>	57,200,000	57,200,000	57,200,000	57,200,000
Coupon Rate <sup>(2)</sup>	3.00%	3.25%	3.25%	3.50%
Bond Term (Years) <sup>(3)</sup>	5	5	5	5
Total Discounted Interest Payments	\$ 4,899,604	\$ 5,286,334	\$ 5,286,334	\$ 5,669,881
Discounted Cost of Inflation - 3 Years <sup>(3)</sup>	6,586,726	6,554,829	6,554,829	6,523,188
Discounted Congestion Reduction & Safety Benefits - 3 Years <sup>(4)</sup>	-	-	-	-
Discounted Economic Benefits *	93,298,216	91,063,635	88,887,785	88,887,785
Other Economic Benefit - Jobs Created *	508	508	508	508
Total Benefits/Cost Avoidance	\$ 6,586,726	\$ 6,554,829	\$ 6,554,829	\$ 6,523,188
Net (Cost) Benefits	\$ 1,687,121	\$ 1,268,495	\$ 1,268,495	\$ 853,307
		Bond Term		
		5 Years		
SHOPP Funds - Federal Share Used for Annual Debt Service (100%)	12,489,881	12,579,172	12,579,172	12,668,735
Estimated Annual Debt Service Payment <sup>(5)</sup>	\$ 12,489,881	\$ 12,579,172	\$ 12,579,172	\$ 12,668,735
Estimated Annual SHOPP Funds Available <sup>(6)</sup>	1,200,000,000	1,200,000,000	1,200,000,000	1,200,000,000
Estimated Annual Debt Service	12,489,881	12,579,172	12,579,172	12,668,735
Estimated Remaining SHOPP Funds After Payment of Debt Service	\$ 1,187,510,119	\$ 1,187,420,828	\$ 1,187,420,828	\$ 1,187,331,265

**Assumptions:**

- (a) The total project cost includes \$8.3 million of support and \$56 million of construction as shown on CTIPS.
- (1) This analysis includes three scenarios with incremental rates based on a principal amount of \$56 million plus 2% cost of issuance.
- (2) Coupon rates are based on current market conditions.
- (3) Absent GARVEE bond financing, this project would be delayed for 3 years with an assumed 3.5% construction inflation rate.
- (4) Congestion reduction and safety benefits are provided by the Office of Transportation Economics for STIP projects but are not applicable for SHOPP projects.
- (5) Debt service payments will be comprised of 100% Federal SHOPP Funds.
- (6) Annual SHOPP Funds available is an estimate of the total amount available at the beginning of each year for SHOPP projects.

**Other Benefits Not Included in this Analysis:**

- # Improved quality of life - Environmental, and Social: Air, wetlands & water quality, noise, visual impact, and other social/neighborhood factors.
- # Expanded business activity as a result of improvement in traffic flow and access.
- # Improved property value due to land development and better land use.

\* Non-Add. For information only. Without GARVEE proceeds, the realization of these benefits would be delayed until other fund sources become available, consistent with the above assumptions.

Every \$100 million invested in transportation creates an average of 790 jobs.

The economic multiplier of each \$100 million invested in transportation is equivalent to \$195 million in economic benefits gained.

**SHOPP Programming for Debt Service**  
**I-80 Auburn Rehab Project**  
(In Millions)

Principal Amount	\$ 56.0
Costs of Issuance (2%)	\$ 1.2
Total Proceeds	\$ 57.2

**PROGRAMMING NEEDS**

Description	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	Total
<b>5 Year Debt Service</b>	12.49	12.49	12.49	12.49	12.49	12.49						\$ 62.45

Required Non-Federal Match @ 8.43%
For Total Amount of Debt Service
Based on 5 Year Debt Service \$ 5.26

**SHOPP**  
**I-80 Auburn Rehab Project**  
**5-Year Term, 3% Coupon Rate**

Year	Coupon Rate	Principal*	Semi-Annual Interest	Annual Interest	Annual Debt Service	Discount Factor	Present Value	Discounted Interest
7/1/2004			\$ 858,000					
1/1/2005	3.00%	\$ 10,773,881	\$ 858,000	\$ 1,716,000	\$ 12,489,881	0.970873786	\$ 1,666,019	
7/1/2005			\$ 696,392	\$ 1,392,784	\$ 12,489,881	0.942595909	\$ 1,312,832	
1/1/2006	3.00%	\$ 11,097,098	\$ 696,392					
7/1/2006			\$ 529,935	\$ 1,059,871	\$ 12,489,881	0.915141659	\$ 969,932	
1/1/2007	3.00%	\$ 11,430,011	\$ 529,935					
7/1/2007			\$ 358,485	\$ 716,970	\$ 12,489,881	0.888487048	\$ 637,019	
1/1/2008	3.00%	\$ 11,772,911	\$ 358,485					
7/1/2008			\$ 181,891	\$ 363,783	\$ 12,489,881	0.862608784	\$ 313,802	
1/1/2009	3.00%	\$ 12,126,099	\$ 181,891					
								\$ 4,899,604
		\$ 57,200,000	\$ 5,249,407	\$ 5,249,407	\$ 62,449,407			

\*Principal includes \$56,000,000 for project funding plus 2% for costs of issuance.

## Cost Of Inflation

Years Project Delayed	Project Cost	Inflation Rate	Cost of Delay	Inflated Cost	Present Value	Discounted Cost
					Discount Factor (3%)	Discount Factor (3%)
1	64,300,000	3.50%	2,250,500	66,550,500	0.970874	2,184,951
2	66,550,500	3.50%	2,329,268	68,879,768	0.942596	2,195,558
3	68,879,768	3.50%	2,410,792	71,290,559	0.915142	2,206,216
4	71,290,559	3.50%	2,495,170	73,785,729	0.888487	2,216,926
5	73,785,729	3.50%	2,582,501	76,368,229	0.862609	2,227,688

Note: Average annual benefits to be gained by advancing GARVEE projects relative to delay, safety, and vehicle operating costs, are not calculated for SHOPP Projects.

## CALIFORNIA TRANSPORTATION COMMISSION

### Financial Allocation and Request to State Treasurer to Issue Grant Anticipation Revenue Vehicle ("GARVEE") Notes

FG-03-,

### AMENDING AND RESTATING RESOLUTION FG-03-01

- 1.1 WHEREAS, under the National Highway System Designation Act of 1995 and the Transportation Equity Act for the 21<sup>st</sup> Century, the United States Congress authorized states to issue GARVEE notes (the "Notes") which are tax-exempt grant anticipation notes backed by annual federal appropriations for federal aid transportation projects, and
- 1.2 WHEREAS, Sections 14550 and 14552-14555 were added to the Government Code of the State of California by Chapter 862 of the Statutes of 1999 (SB 928) (the "Act") to provide for the implementation of the State's GARVEE Program (the "Program"), and
- 1.3 WHEREAS, in accordance with the Act, the Commission has adopted Grant Anticipation Revenue Vehicle (GARVEE) Guidelines (the "Guidelines") in order to establish guidelines for eligibility for funding allocations under the Act, and
- 1.4 WHEREAS, the Commission has determined to allocate funds for the acquisition and construction of certain eligible projects as specifically identified by this Resolution (the "Series A Projects") and to provide for funding of the Series A Projects through the issuance of a series of Notes under the Act and in accordance with the Guidelines, and
- 1.5 WHEREAS, pursuant to the Act the Commission must resolve to dedicate and pledge any future receipts of federal transportation funds (as such term is defined in the Act) received by the State to the payment of principal of and interest and premium on Notes issued pursuant to the Act for as long as any Notes remain outstanding, and
- 1.6 WHEREAS, pursuant to the Act the Commission must request that the State Treasurer issue Notes to provide the funds allocated for the Series A Projects, and
- 1.7 WHEREAS, pursuant to the Act, the Commission must determine that funding utilizing the Program achieves maximum efficiency from the State's federal allocation of transportation funds.

NOW THEREFORE BE IT RESOLVED AS FOLLOWS:

2.1 Funding Allocations. The following allocations to the respective projects as described below (collectively, the "Series A Projects") are hereby approved by this Commission:

2.1.1 State Transportation Improvement Program (STIP) Project Santa Clara Interstate 880/Coleman Interchange (PPNO 0409C). The sum of \$67,000,000\$68,000,000 is hereby allocated to PPNO 0409C for the project and for payment of capitalized interest and the costs of issuance, without limitation. Such funds shall be derived from the proceeds of the issuance of the Notes by the State Treasurer and from no other source. Attached to this Resolution as Exhibit A is an allocation vote box specifically identifying PPNO 0409C and detailing the project location and description, and ~~project support expenditure~~the estimated amount of bond proceeds neededs. PPNO 0409C has been approved by the Federal Highway Administration for partial funding under the federal GARVEE program. The projected annual debt service in connection with PPNO 0409C, to be repaid solely from Regional Improvement Program (RIP) funds, is described in Exhibits B.1. and B.2. to this Resolution. The term and amount of the actual annual debt service will be established at the time of the sale of the Notes.

For the Interstate 880/Coleman Interchange project, August 11, 2003 is to be the earliest date in which eligible expenses will be reimbursed.

2.1.2 STIP Project Riverside Route 215 (PPNO 0121D). The sum of \$242,000,000\$247,500,000 is hereby allocated to PPNO 0121D for the project and for payment of capitalized interest and the costs of issuance, without limitation. Such funds shall be derived from the proceeds of the issuance of the Notes by the State Treasurer and from no other source. ~~It is intended that \$140,000,000 in proceeds will be obtained through the issuance of GARVEE bonds in January 2004 and \$102,000,000 will be obtained through the issuance of GARVEE bonds in July 2005.~~ Attached to this Resolution as Exhibit A is an allocation vote box specifically identifying PPNO 0121D and detailing the project location and description, and ~~project support expenditure~~the estimated amount of bond proceeds needed. PPNO 0121D has been approved by the Federal Highway Administration for partial funding under the federal GARVEE program. The projected annual debt service in connection with PPNO 0121D, to be repaid 85% from RIP funds and 15% from Inter-regional Improvement Program (IIP) funds, is described in Exhibits B.1. and B.2. to this Resolution. The term and amount of the actual annual debt service will be established at the time of the sale of the Notes.

2.1.3 STIP Project San Diego I-15 HOV Lanes (PPNO 0672). The sum of \$181,000,000\$189,000,000 is hereby allocated to PPNO 0672 for the project and for payment of capitalized interest and the costs of issuance, without limitation. Such funds shall be derived from the proceeds of the issuance of the Notes by the State Treasurer and from no other source. Attached to this Resolution as Exhibit

A is an allocation vote box specifically identifying PPNO 0672 and detailing the project location and description, and ~~project support expenditures~~the estimated amount of bond proceeds needed. PPNO 0672 has been approved by the Federal Highway Administration for partial funding under the federal GARVEE program. The projected annual debt service in connection with PPNO 0672, to be repaid 75% from RIP funds and 25% from IIP funds, is described in Exhibits B.1. and B.2. to this Resolution. **The term and amount of the actual annual debt service will be established at the time of the sale of the Notes.**

- 2.1.4 STIP Project Santa Clara State Route 87 North (PPNO 0443N). The sum of \$37,000,000 is hereby allocated to PPNO 0443N for the project and for payment of capitalized interest and the costs of issuance, without limitation. Such funds shall be derived from the proceeds of the issuance of the Notes by the State Treasurer and from no other source. Attached to this Resolution as Exhibit A is an allocation vote box specifically identifying PPNO 0443N and detailing the project location and description and the estimated amount of bond proceeds needed. The projected annual debt service in connection with PPNO 0443N, to be repaid solely from RIP funds, is described in Exhibits B.1. and B.2. to this Resolution. The term and amount of the actual annual debt service will be established at the time of the sale of the Notes.
- 2.1.5 STIP Project Santa Clara State Route 87 South (PPNO 0443S). The sum of \$42,500,000 is hereby allocated to PPNO 0443S for the project and for payment of capitalized interest and the costs of issuance, without limitation. Such funds shall be derived from the proceeds of the issuance of the Notes by the State Treasurer and from no other source. Attached to this Resolution as Exhibit A is an allocation vote box specifically identifying PPNO 0443S and detailing the project location and description and the estimated amount of bond proceeds needed. The projected annual debt service in connection with PPNO 0443S, to be repaid solely from RIP funds, is described in Exhibits B.1. and B.2. to this Resolution. The term and amount of the actual annual debt service will be established at the time of the sale of the Notes.
- 2.1.6 STIP Project Los Angeles County Metropolitan Transportation Authority (LACMTA) Route 5 High-Occupancy Vehicle Lanes from Route 118 to Route 14 (PPNO 0162P). The sum of \$26,000,000 is hereby allocated to PPNO 0162P for the project and for payment of capitalized interest and the costs of issuance, without limitation. Such funds shall be derived from the proceeds of the issuance of the Notes by the State Treasurer and from no other source. Attached to this Resolution as Exhibit A is an allocation vote box specifically identifying PPNO 0162P and detailing the project location and description and the estimated amount of bond proceeds needed. The projected annual debt service in connection with PPNO 0162P, to be repaid solely from RIP funds, is described in Exhibits B.1. and B.2. to this Resolution. The term and amount of the actual annual debt service will be established at the time of the sale of the Notes.

- 2.1.7 STIP Project Los Angeles County Metropolitan Transportation Authority (LACMTA) Route 14 near Palmdale, from Vincent Ramp Undercrossing to Avenue P-8 Undercrossing (PPNO 0391A). The sum of \$33,000,000 is hereby allocated to PPNO 0391A for the project and for payment of capitalized interest and the costs of issuance, without limitation. Such funds shall be derived from the proceeds of the issuance of the Notes by the State Treasurer and from no other source. Attached to this Resolution as Exhibit A is an allocation vote box specifically identifying PPNO 0391A and detailing the project location and description and the estimated amount of bond proceeds needed. The projected annual debt service in connection with PPNO 0391A, to be repaid solely from RIP funds, is described in Exhibits B.1. and B.2. to this Resolution. **The term and amount of the actual annual debt service will be established at the time of the sale of the Notes.**
- 2.1.8 STIP Project Los Angeles County Metropolitan Transportation Authority (LACMTA) Route 90 Playa Vista Area Congestion Improvement (PPNO 2012A). The sum of \$13,000,000 is hereby allocated to PPNO 2012A for the project and for payment of capitalized interest and the costs of issuance, without limitation. Such funds shall be derived from the proceeds of the issuance of the Notes by the State Treasurer and from no other source. Attached to this Resolution as Exhibit A is an allocation vote box specifically identifying PPNO 2012A and detailing the project location and description and the estimated amount of bond proceeds needed. The projected annual debt service in connection with PPNO 2012A, to be repaid solely from RIP funds, is described in Exhibits B.1. and B.2. to this Resolution. **The term and amount of the actual annual debt service will be established at the time of the sale of the Notes.**
- 2.1.9 STIP Project Los Angeles County Metropolitan Transportation Authority (LACMTA) Route 405 Auxiliary Lane from Waterford Avenue to Route 10 (PPNO 2333). The sum of \$30,000,000 is hereby allocated to PPNO 2333 for the project and for payment of capitalized interest and the costs of issuance, without limitation. Such funds shall be derived from the proceeds of the issuance of the Notes by the State Treasurer and from no other source. Attached to this Resolution as Exhibit A is an allocation vote box specifically identifying PPNO 2333 and detailing the project location and description and the estimated amount of bond proceeds needed. The projected annual debt service in connection with PPNO 2333, to be repaid 76% from RIP funds and 24% from IIP funds, is described in Exhibits B.1. and B.2. to this Resolution. **The term and amount of the actual annual debt service will be established at the time of the sale of the Notes.**
- 2.1.10 STIP Project Los Angeles County Metropolitan Transportation Authority (LACMTA) North Bound Route 405/101 Gap Closure (PPNO 2336). The sum of \$27,000,000 is hereby allocated to PPNO 2336 for the project and for payment of capitalized interest and the costs of issuance, without limitation. Such funds shall be derived from the proceeds of the issuance of the Notes by the State Treasurer

and from no other source. Attached to this Resolution as Exhibit A is an allocation vote box specifically identifying PPNO 2336 and detailing the project location and description and the estimated amount of bond proceeds needed. The projected annual debt service in connection with PPNO 2336, to be repaid 66% from RIP funds and 34% from IIP funds, is described in Exhibits B.1. and B.2. to this Resolution. **The term and amount of the actual annual debt service will be established at the time of the sale of the Notes.**

- 2.1.11 State Highway Operation and Protection Program (SHOPP) Route 193 to Auburn Ravine and 0.5 miles west of Auburn Ravine to Route 174 (PPNO 1517). The sum of \$58,000,000 is hereby allocated to PPNO 1517 for the project and for payment of capitalized interest and the costs of issuance, without limitation. Such funds shall be derived from the proceeds of the issuance of the Notes by the State Treasurer and from no other source. Attached to this Resolution as Exhibit A is an allocation vote box specifically identifying PPNO 1517 and detailing the project location and description and the estimated amount of bond proceeds needed. The projected annual debt service in connection with PPNO 1517, to be repaid solely from SHOPP funds, is described in Exhibits B.1. and B.2. to this Resolution. **The term and amount of the actual annual debt service will be established at the time of the sale of the Notes.**
- 2.2 Funding Allocations Determined Eligible. The Series A Projects have been determined eligible for GARVEE financing in accordance with Title 23 of the U.S. Code, California Government Code Sections 14550, et. seq., and all other applicable federal and state laws and regulations. Funding of the Series A Projects as set forth above is consistent with the Commission's policies, including without limitation, the Guidelines.
- 2.3 Intention to Finance Using the Program. The Commission declares its intent to finance the Series A Projects pursuant to the Program.
- 2.4 Request to State Treasurer. The Commission hereby requests that the State Treasurer proceed to identify a finance team, including without limitation, bond counsel, financial advisor and underwriter or underwriters, and prepare for sale the issuance of a series of the Notes (the "Series A Notes") in a principal amount sufficient to fund the allocations described in Section 2.1 hereof. This request is intended to satisfy the requirements of Section 14553.9 of the Act.
- 2.5 Pledge of Future Receipts. The Commission hereby dedicates and pledges future receipts of federal transportation funds (as that term is defined in the Act) received by the State to the payment of principal of, and interest and premium on the Notes, for as long as any Notes remain outstanding. This dedication and pledge is intended to satisfy Section 14553.7 of the Act.

- 2.6 Section 14553.4 Restriction Satisfied. The annual repayment obligation with respect to all Notes in any fiscal year during which any Notes are outstanding is not anticipated to exceed thirty percent (30 percent) of the total amount of the federal transportation funds deposited in the State Highway Account in the State Transportation Fund for any consecutive twelve (12)-month period within the preceding twenty-four (24) months as identified in the State Treasurer's "Analyses of GARVEE Bonding Capacity 2003".
- 2.7 Other Methods of Funding Not Appropriate. The Commission hereby determines that providing funding of the allocations identified in Section 2.1 hereof through the issuance of Notes under the Program will achieve maximum efficiency from the State's federal allocation of transportation funds and that other methods of financing are either not appropriate or not available.

## CTC Financial Vote List

December 10-11, 2003

## 2.5 Highway Financial Matters

Project #	EA	Allocation Amount
Allocation Amount	PPNO	
Recipient	Program / Year	Budget Year
RTPA/CTC	PA&ED	Item #
County	PS&E	Program Code
Dist-Co-Rte	Const Eng	Bond Proceeds
Postmile (Kilopost)	CONST	Total Amount
<b>2.5b.(6) STIP and SHOPP Projects On the State Highway System - GARVEE</b>	<b>Resolution FG-03- , Amending and Restating Resolution FG-03-01</b>	
1 \$67,000,000 \$68,000,000 <b>Santa Clara VTA</b> <b>MTC</b> Santa Clara 04N-SCI-880 3.2/2.4	San Jose: I-880@Coleman; Reconstruct Coleman Ave. bridge & realign, reconstruct all ramps accessing I-880 & add new direct connection ramp to SB I-880 from Airport Blvd & Newhall St.  <b>Note:</b> The amount identified for Project Funding includes principal and the issuance cost. The aggregate amount of the bonds for this I-880 project includes costs for right of way, construction, support and issuance and is currently estimated at \$66,000,000. The amount identified for Project Allocation (\$67,000,000) includes financing contingencies.	Project Funding <b>(GARVEE Bond Proceeds)</b> 262001 2003-04 04-0409C XXXX-XX RIP / 03-04 801-6804 \$0 XXX-6801 \$0 20.20.075.600 \$0 \$67,000,000 <b>\$68,000,000</b>
<b>Note: An Allocation of \$67,000,000 was made for this project at the September 2003 meeting. This revised allocation represents updated financing estimates, including adjustments for capitalized interest and bond insurance. The aggregate amount of the bond proceeds for this project, which will be used to pay for right of way, construction, support, and certain financing costs, is currently estimated at \$67,945,000. The amount identified for Project Allocation (\$68,000,000) includes financing contingencies.</b>		
Other programmed construction funds: TCRP: \$ 5,000,000		
Contributions from other sources: Local: \$18,147,600		

## CTC Financial Vote List

December 10-11, 2003

## 2.5 Highway Financial Matters

Project #	Allocation Amount	Recipient	Location	EA PPNO	Program / Year	Budget Year	Allocation Amount
County		RTPA/CTC	Project Description	PA&ED	Item #	Program Code	Bond Proceeds
Dist-Co-Rte			Project Support Expenditures	PS&E	Const Eng	CONST	Total Amount
<b>2.5b.(6) STIP and SHOPP Projects On the State Highway System - GARVEE</b>						<b>Resolution FG-03- Amending and Restating Resolution FG-03-01</b>	
2							
\$242,000,000	In Riverside County and Moreno Valley on Route 215 from 0.1 km South of Eucalyptus Avenue Overcrossing to Columbia Avenue Overcrossing and on Route 60 from 1.1 km East of Day Street Overcrossing to 0.4 km West of Main Street Overcrossing and on Route 91 from 0.3 km South of University Avenue Undercrossing to 0.2 km North of Spruce Street Overcrossing.	Project Funding (GARVEE Bond Proceeds)	3348U1 08-0121D RIP / 03-04 \$0 \$0 \$0	2003-04 XXXX-XX 801-6804 XXX-6801 20.20.075.600	\$119,000,000 \$210,375,000		
\$247,500,000	Widen Route 215, Construct truck climbing lanes and Auxiliary lane, improve mainlines and interchanges.						
Department of Transportation							
RCTC							
Riverside							
08S-Riv-215, 60, 91							
37.4/43.9, 19.3/11.5,							
20.3/21.6							
<b>Note:</b> The amount identified for Project Funding includes principal and the issuance cost. The aggregate amount of the bonds for this Riverside project includes costs for right of way, construction, and issuance and is currently estimated at \$238,800,000. The amount identified for Project Allocation (\$242,000,000) includes financing contingencies.							
<b>Note:</b> An allocation of \$242,000,000 was made for this project at the September 2003 meeting. This revised allocation represents updated financing estimates, including adjustments for capitalized interest and bond insurance. The aggregate amount of the bond proceeds for this project, which will be used to pay for right of way, construction, support, and certain financing costs, is currently estimated at \$247,100,000. The amount identified for Project Allocation (\$247,500,000) includes financing contingencies.							
<b>The original allocation for this project was based on two separate bond sales. \$140,000,000 was allocated for the first sale and \$102,000,000 was allocated for Fiscal Year (FY) 2005-06. The financing has now been restructured to accommodate a single issuance. The RIP and IIP allocations for FY 2005-06 are, therefore, being eliminated and redirected to a single allocation, as reflected in these numbers.</b>							
Other programmed construction funds: TCRP: \$1,085,000							
Contributions from other sources: CMAQ: \$15,042,000 RSTP: \$13,327,000 Local: \$33,915,000							
Related STIP Amendment 02S-102							

## CTC Financial Vote List

December 10-11, 2003

## 2.5 Highway Financial Matters

Project #	EA	Allocation Amount
Allocation Amount	PPNO	Allocation Amount
Recipient	Program / Year	Budget Year
RTPA/CTC	PA&ED	Item #
County	PS&E	Program Code
Dist-Co-Rte	Const Eng	Bond Proceeds
Postmile (Kilopost)	CONST	Total Amount
<b>2.5b.(6) STIP and SHOPP Projects On the State Highway System - GARVEE</b>		<b>Resolution FG-03- Amending and Restating Resolution FG-03-01</b>
<b>3</b>		
\$181,000,000 \$189,000,000 Department of Transportation <u>SANDAG</u> San Diego 11S-SD-15 M18.8/M28.1 (M30.2/M45.2)	In San Diego near Escondido on Route 15 from north of Poway Road Overcrossing to north of Clarance Lane Undercrossing. Construct managed lanes (middle segment – Units 2-5).  <u>Note:</u> The amount identified for Project Funding includes principal and the issuance cost. The aggregate amount of the bonds for this I-15 project includes costs for construction, support and issuance and is currently estimated at \$178,000,000. The amount identified for Project Allocation (\$181,000,000) includes financing contingencies.	<b>Project Funding (GARVEE Bond Proceeds)</b> 0809– 2003-04 11-0672 XXXX-XX \$135,750,000 RIP / 03-04 801-6804 \$141,750,000 \$0 XXX-6801 \$0 20.20.075.600 \$0 \$135,750,000 \$141,750,000  <u>Note: An allocation of \$181,000,000 was made for this project at the September 2003 meeting. This revised allocation represents updated project and financing estimates, including adjustments for capitalized interest and bond insurance. The aggregate amount of the bond proceeds for this project, which will be used to pay for construction, support, and certain financing costs, is currently estimated at \$188,385,000. The amount identified for Project Allocation (\$189,000,000) includes financing contingencies.</u>  Other programmed construction funds: STIP IIP: \$ 2,559,000 STIP RIP: \$12,000,000 SHOPP funds: \$ 4,136,000 TCRP: \$ 6,900,000  Contributions from other sources: CMAQ: \$11,000,000 RSTP: \$23,427,000
<b>4</b>		
\$37,000,000 Santa Clara VTA <u>MTC</u> Santa Clara 04N-SCI-87 4.9/6.7	In San Jose, from Julian Street to I-280. Construct HOV lane in each direction.  <u>Note:</u> The amount identified for Project Funding includes principal and the issuance cost. The aggregate amount of the bonds for this SR-87 project includes costs for right of way, construction, support and issuance and is currently estimated at \$36,300,000. The amount identified for Project Allocation (\$37,000,000) includes financing contingencies.	<b>Project Funding (GARVEE Bond Proceeds)</b> XXXX-XX XXX-6801 \$37,000,000 439611 20.20.075.600 04-0443N RIP / 03-04 \$0 \$0 \$0 \$37,000,000  Contributions from other sources: Local: \$14,121,000  Related STIP Amendment 02S-060 approved at the May 2003 Commission Meeting

## CTC Financial Vote List

December 10-11, 2003

## 2.5 Highway Financial Matters

Project #	EA	Allocation Amount
Allocation Amount	PPNO	
Recipient	Program / Year	Budget Year
RTPA/CTC	PA&ED	Item #
County	PS&E	Program Code
Dist-Co-Rte	Const Eng	Bond Proceeds
Postmile (Kilopost)	CONST	Total Amount
<b>2.5b.(6) STIP and SHOPP Projects On the State Highway System - GARVEE</b>	<b>Resolution FG-03-_____, Amending and Restating Resolution FG-03-01</b>	
5		
\$42,500,000 Department of Transportation <u>MTC</u> Santa Clara 04S-SCI-87 0.0/5.1	SR 87, between Branham Lane and I-280, a distance of approximately 4.5 miles. Construct a HOV lane in each direction in the existing median.  <b>Note:</b> The amount identified for Project Funding includes principal and issuance costs. The aggregate amount of the bonds for this SR-87 project includes costs for right of way, construction, support and issuance and is currently estimated at \$41,800,000. The amount identified for Project Allocation (\$42,500,000) includes financing contingencies. SHOPP project, PPNO 0442E will be combined with this STIP project for construction. \$2,122,180 in SHOPP State Only Funds will be applied to the non-federal matching requirement for the STIP GARVEE debt service. An allocation for the SHOPP project is expected in early in 2004.	Project Funding (GARVEE Bond Proceeds) 439601 04-0443S RIP / 03-04  \$0 \$0 \$0  \$42,500,000
	Contributions from other sources: Local: \$12,404,000	
	Related STIP Amendment 02S-060 approved at the May 2003 Commission Meeting	
6	Route 5, from Route 118 to Route 14. Add High Occupancy Vehicle (HOV) Lanes.  <b>Note:</b> The amount identified for Project Funding includes principal and issuance costs. The aggregate amount of the bonds for this I-5 project includes costs for construction capital and issuance and is currently estimated at \$24,400,000. The amount identified for Project Allocation (\$26,000,000) includes financing contingencies.	Project Funding (GARVEE Bond Proceeds) 12200 07-0162P RIP / 03-04  \$0 \$0 \$0  \$26,000,000
	Contributions from other sources: TCRP: \$2,020,000 Local: \$2,750,000 RSTP: \$1,310,000 CMAQ: \$4,690,000	
	Related STIP Amendment 02S-105 is included in the December 2003 Agenda for concurrent action	

## CTC Financial Vote List

December 10-11, 2003

## 2.5 Highway Financial Matters

Project #	EA	Allocation Amount		
Allocation Amount	PPNO	Program / Year	Budget Year	Allocation Amount
Recipient	PA&ED	Item #	Program Code	Bond Proceeds
RTPA/CTC	PS&E			
County	Const Eng			
Dist-Co-Rte	CONST			
Postmile (Kilopost)				Total Amount
<b>2.5b.(6) STIP and SHOPP Projects On the State Highway System - GARVEE</b>	<b>Resolution FG-03-____, Amending and Restating Resolution FG-03-01</b>			
7	<b>Project Funding (GARVEE Bond Proceeds)</b>			
\$33,000,000 Department of Transportation <u>LACMTA</u> Los Angeles 07-LA-14 54.5/87.7	Route 14, near Palmdale, from Vincent Ramp Undercrossing to Avenue P-8 Undercrossing. Add one HOV Lane in each direction.  <b>Note:</b> The amount identified for Project Funding includes principal and issuance costs. The aggregate amount of the bonds for this Route 14 project includes costs for construction capital and issuance and is currently estimated at \$31,400,000. The amount identified for Project Allocation (\$33,000,000) includes financing contingencies.	12520 07-0391A RIP / 03-04 \$0 \$0 \$0	XXXX-XX XXX-6801 20.20.075.600	\$33,000,000
	Contributions from other sources: Local: \$5,752,000 RSTP: \$2,410,000 CMAQ: \$1,947,000			
	Related STIP Amendment 02S-105 is included in the December 2003 Agenda for concurrent action			
8	<b>Project Funding (GARVEE Bond Proceeds)</b>			
\$13,000,000 Department of Transportation <u>LACMTA</u> Los Angeles 07-LA-90 1.2/1.9	Route 90, Playa Vista Area Congestion Improvement, near Marina Del Rey from Mindanao Way to Centinela Avenue. Construct undercrossing, widen to 8 lanes, modify signals and widen off-ramps.  <b>Note:</b> The amount identified for Project Funding includes principal and the issuance cost. The aggregate amount of the bonds for this Route 90 project includes costs for construction capital and issuance and is currently estimated at \$11,700,000. The amount identified for Project Allocation (\$13,000,000) includes financing contingencies.	16931 07-2012A RIP / 03-04 \$0 \$0 \$0	XXXX-XX XXX-6801 20.20.075.600	\$13,000,000
	Contributions from other sources: Local: \$2,200,000			
	Related STIP Amendment 02S-105 is included in the December 2003 Agenda for concurrent action			
9	<b>Project Funding (GARVEE Bond Proceeds)</b>			
\$30,000,000 Department of Transportation <u>LACMTA</u> Los Angeles 07-LA-405 29.3/47.0	Route 405 Auxiliary Lane, in Los Angeles from Waterford Avenue to Route 10. Construct southbound auxiliary lane.  <b>Note:</b> The amount identified for Project Funding includes principal and issuance costs. The aggregate amount of the bonds for this I-405 project includes costs for construction capital and issuance and is currently estimated at \$29,000,000. The amount identified for Project Allocation (\$30,000,000) includes financing contingencies.	19590 07-2333 RIP / 03-04 \$0 \$0 \$0	XXXX-XX XXX-6801 20.20.075.600	\$22,800,000
	Contributions from other sources: TCRP: \$4,748,000			
	Related STIP Amendment 02S-105 is included in the December 2003 Agenda for concurrent action			
	19590 07-2333 IIP / 03-04 \$0 \$0 \$0	XXXX-XX XXX-6801 20.20.025.700	\$7,200,000	
			\$7,200,000	
				\$30,000,000
				\$30,000,000

## CTC Financial Vote List

December 10-11, 2003

## 2.5 Highway Financial Matters

Project #	Allocation Amount	Recipient	Location	EA PPNO	Program / Year	Budget Year	Allocation Amount
		RTPA/CTC	Project Description	PA&ED PS&E	Item #	Program Code	Bond Proceeds
		County	Project Support Expenditures	Const Eng CONST			Total Amount
<b>2.5b.(6) STIP and SHOPP Projects On the State Highway System - GARVEE</b>						<u>Resolution FG-03-</u> <u>Amending and Restating Resolution FG-03-01</u>	
10							
\$27,000,000	Department of Transportation	Los Angeles	North Bound Route 405/101 Gap Closure, in Los Angeles from Greenleaf off-ramp to north of Ventura Boulevard. Construct on-ramps.	<b>Project Funding (GARVEE Bond Proceeds)</b>			
07-LA-405	LACMTA	07.6/61.9	<b>Note:</b> The amount identified for Project Funding includes principal and issuance costs. The aggregate amount of the bonds for this I-405 project includes costs for construction capital and issuance and is currently estimated at \$26,000,000. The amount identified for Project Allocation (\$27,000,000) includes financing contingencies.	20120	07-2336	XXXX-XX	
					RIP / 03-04	XXX-6801	\$17,800,000
					\$0	\$0	20.20.075.600
					\$0	\$0	
					\$0	\$0	
					\$17,800,000		
			Contributions from other sources: TCRP: \$9,500,000	20120	07-2336	XXXX-XX	
					IIP / 03-04	XXX-6801	\$9,200,000
			Related STIP Amendment 02S-105 is included in the December 2003 Agenda for concurrent action		\$0	\$0	20.20.025.700
					\$0	\$0	
					\$9,200,000		
							\$27,000,000
							\$27,000,000
11							
\$58,000,000	Department of Transportation	Placer	In and near Auburn - Route 193 to Auburn Ravine and 0.5 miles west of Auburn Ravine to Route 174. Roadway and bridge rehabilitation GARVEE payback.	<b>Project Funding (GARVEE Bond Proceeds)</b>			
03N-PLA-80	03N-PLA-80	14.3/33.3	<b>Note:</b> The amount identified for Project Funding includes principal and issuance costs. The aggregate amount of the bonds for this Route 80 project includes costs for construction and issuance and is currently estimated at \$57,200,000. The amount identified for Project Allocation (\$58,000,000) includes financing contingencies.	0A6000	XXXX-XX	XXX-6801	\$58,000,000
				03-1517	20.20.201.120		
			Related SHOPP Amendment 02H-128 was conditionally approved at the October 2003 Commission Meeting	SHOPP / 03-04		\$58,000,000	\$58,000,000



**Impact of Revised Debt Service (D/S) to the Fund Estimate\* (FE) -- 10-Year Term**

(\$\$\$ in thousands)													
	04/05*	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	Total
<b>AUBURN I-80 SHOPP PROJECT</b>													\$ 60,650
Current D/S Estimate	\$ 11,475	12,292	12,295	12,296	12,292	-	-	-	-	-	-	-	60,650
SHOPP @ 100%	11,475	12,292	12,295	12,296	12,292	-	-	-	-	-	-	-	60,650
<b>LACMTA PPNO# 162P PROJECT</b>													\$ 28,646
Current D/S Estimate	\$ 2,696	2,886	2,884	2,885	2,882	2,885	2,883	2,881	2,882	2,882	2,882	-	\$ 28,646
RIP Share @ 100%	2,696	2,886	2,884	2,885	2,882	2,885	2,883	2,881	2,882	2,882	2,882	-	-
IIP Share @ 0%	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>LACMTA PPNO# 391A PROJECT</b>													\$ 36,908
Current D/S Estimate	\$ 3,469	3,717	3,715	3,713	3,715	3,715	3,717	3,717	3,717	3,713	3,713	-	\$ 36,908
RIP Share @ 100%	3,469	3,717	3,715	3,713	3,715	3,715	3,717	3,717	3,717	3,713	3,713	-	-
IIP Share @ 0%	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>LACMTA PPNO# 2012A PROJECT</b>													\$ 13,719
Current D/S Estimate	\$ 1,293	1,379	1,382	1,381	1,381	1,380	1,381	1,380	1,382	1,379	1,381	-	\$ 13,719
RIP Share @ 100%	1,293	1,379	1,382	1,381	1,381	1,380	1,381	1,380	1,382	1,379	1,381	-	-
IIP Share @ 0%	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>LACMTA PPNO# 2333 PROJECT</b>													\$ 34,176
Current D/S Estimate	\$ 3,211	3,441	3,442	3,439	3,442	3,442	3,441	3,441	3,439	3,442	3,437	-	\$ 34,176
RIP Share @ 76%	2,440	2,615	2,616	2,614	2,616	2,616	2,615	2,615	2,616	2,616	2,612	-	\$ 25,974
IIP Share @ 24%	771	826	826	825	826	826	825	826	826	825	825	-	\$ 8,202
<b>LACMTA PPNO# 2336 PROJECT</b>													\$ 30,526
Current D/S Estimate	\$ 2,873	3,073	3,074	3,072	3,071	3,074	3,073	3,071	3,071	3,074	3,074	-	\$ 30,526
RIP Share @ 66%	1,896	2,028	2,029	2,028	2,027	2,029	2,028	2,027	2,027	2,029	2,029	-	\$ 20,147
IIP Share @ 34%	977	1,045	1,045	1,044	1,044	1,045	1,045	1,044	1,044	1,044	1,045	-	\$ 10,379
<b>ESTIMATED TOTAL DEBT SERVICE FOR ALL PROJECTS</b>													
Total Debt Service	\$ 88,921	95,226	95,234	95,225	95,217	92,930	82,930	82,927	82,925	82,924	-	-	\$ 884,459
Total RIP Share	66,469	71,179	71,183	71,174	71,170	71,175	71,173	71,170	71,170	71,170	71,170	-	\$ 707,038
Total IIP Share	10,977	11,755	11,756	11,755	11,755	11,755	11,755	11,754	11,754	11,754	11,754	-	\$ 116,771
Total SHOPP Share	11,475	12,292	12,295	12,296	12,292	-	-	-	-	-	-	-	\$ 60,650

**ESTIMATED TOTAL DEBT SERVICE FOR ALL PROJECTS**

Total Debt Service	\$ 88,921	95,226	95,234	95,225	95,217	92,930	82,930	82,927	82,925	82,924	-	-	\$ 884,459
Total RIP Share	66,469	71,179	71,183	71,174	71,170	71,175	71,173	71,170	71,170	71,170	-	-	\$ 707,038
Total IIP Share	10,977	11,755	11,756	11,755	11,755	11,755	11,755	11,754	11,754	11,754	-	-	\$ 116,771
Total SHOPP Share	11,475	12,292	12,295	12,296	12,292	-	-	-	-	-	-	-	\$ 60,650

\*The Fund Estimate detail is based on August 2003 projections for FY 04/05 through 08/09.

\*Debt service payments shown in FY04/05 are net of the amount of capitalized interest payment (\$8,969,000) since this first interest payment will be made from bond proceeds.



## Impact of Revised Debt Service Schedules to the Fund Estimate\* (FE) -- 11-Year Term

(\$\$\$ in thousands)

	04/05**	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	Total
<b>AUBURN L-80 SHOPP PROJECT</b>	\$ 9,719	10,409	10,410	10,406	10,409	10,408	-	-	-	-	-	-	\$ 61,761
Current D/S Estimate SHOPP @ 100%	9,719	10,409	10,410	10,406	10,409	10,408	-	-	-	-	-	-	61,761
<b>LACMTA PPNO# 162P PROJECT</b>	\$ 2,501	2,680	2,681	2,682	2,680	2,679	2,680	2,682	2,677	2,677	2,682	-	\$ 29,301
Current D/S Estimate RIP Share @ 100%	2,501	2,680	2,681	2,682	2,680	2,679	2,680	2,682	2,677	2,677	2,682	-	29,301
IP Share @ 0%	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>LACMTA PPNO# 391A PROJECT</b>	\$ 3,223	3,450	3,453	3,452	3,452	3,454	3,451	3,453	3,450	3,454	3,451	-	\$ 37,743
Current D/S Estimate RIP Share @ 100%	3,223	3,450	3,453	3,452	3,452	3,454	3,451	3,453	3,450	3,454	3,451	-	37,743
IP Share @ 0%	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>LACMTA PPNO# 2012A PROJECT</b>	\$ 1,200	1,285	1,284	1,280	1,283	1,281	1,281	1,283	1,283	1,285	1,284	-	\$ 14,027
Current D/S Estimate RIP Share @ 100%	1,200	1,285	1,284	1,280	1,283	1,281	1,281	1,283	1,283	1,285	1,284	-	14,027
IP Share @ 0%	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>LACMTA PPNO# 2333 PROJECT</b>	\$ 2,984	3,195	3,196	3,199	3,198	3,196	3,195	3,198	3,197	3,196	3,196	-	\$ 34,950
Current D/S Estimate RIP Share @ 76%	2,268	2,428	2,429	2,431	2,430	2,429	2,428	2,430	2,430	2,429	2,429	-	26,562
IP Share @ 24%	716	767	767	768	768	767	767	768	767	767	767	-	8,388
<b>LACMTA PPNO# 2336 PROJECT</b>	\$ 2,664	2,854	2,854	2,857	2,857	2,857	2,853	2,856	2,856	2,855	2,853	-	\$ 31,216
Current D/S Estimate RIP Share @ 66%	1,758	1,884	1,884	1,886	1,886	1,886	1,883	1,885	1,885	1,884	1,883	-	20,603
IP Share @ 34%	906	970	970	971	971	971	970	971	971	971	970	-	10,613
<b>ESTIMATED TOTAL DEBT SERVICE FOR ALL PROJECTS</b>													
Total Debt Service	\$ 81,674	87,454	87,466	87,463	87,462	87,048	77,056	77,052	77,055	77,048	-	-	\$ 904,242
Total RIP Share	61,756	66,124	66,134	66,133	66,133	66,127	66,133	66,130	66,133	66,128	-	-	723,053
Total IIP Share	10,199	10,921	10,922	10,924	10,922	10,923	10,923	10,922	10,923	10,922	10,920	-	119,418
Total SHOPP Share	9,719	10,409	10,410	10,406	10,409	10,408	-	-	-	-	-	-	61,761

\*The Fund Estimate detail is based on August 2003 projections for FY 04/05 through 08/09.

\*\*Debt service payments shown in FY04/05 are net of the amount of capitalized interest payment (\$9,387,000) since this first interest payment will be made from bond proceeds.